

Ian Gordon & Elizabeth Yates



Ian Gordon, Teaching & Learning Librarian



# This Course: HLSC 3P80 Child Health

# **Course Calendar Description:**

Exploration of the biological, psychological & sociological determinants of children's health.

# **Additional Description:**

This course will examine health and development issues among children in Canada.

It will take a complementary biopsychosocial perspective to explore both the physical and mental health aspects of children from infancy through a lolescence and early adulthood.

The main goal of the course is to introduce students to a broad way of thinking about child health, integrating the biomedical model and the biopsychosocial model to critically evaluate current policies and perceptions of health and health services.

# **Evidence Synthesis Library Seminar Learning Outcomes**

- Understand the importance of evidence synthesis when critically evaluating health issues
- Synthesis, evaluate, communicate, and comment on child health research issues
- Note the value of different evidence synthesis reviews and where rapid reviews fit in
- How best to select appropriate scholarly databases
- The importance of thinking like each database to get the best results
- Screening results for eligibility using inclusion/exclusion criteria
- Identifying emergent themes and writing up results
- Recognize the value of zoterobib and Zotero citation management software
- Documenting findings using PRISMA reporting guidelines and references
- Knowing where and how to get help

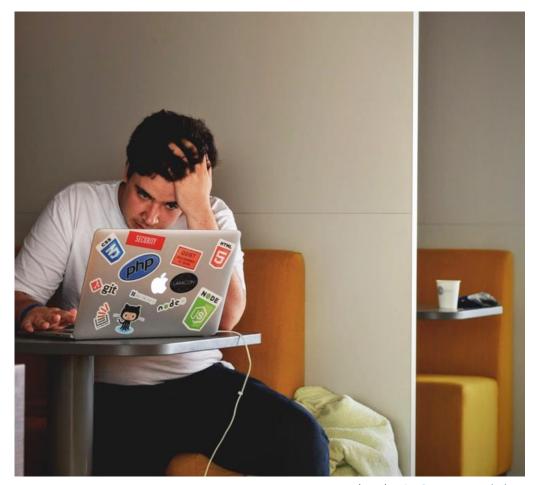


Photo by <u>Tim Gouw</u> on <u>Unsplash</u>

# Evidence Synthesis Library Seminar Where to get Help

Brock Library Health Sciences Research Guide

https://researchguides.library.brocku.ca/HLSC

Library Resources for HLSC 3P80

https://researchguides.library.brocku.ca/HLSC3P80

Email the Library

libhelp@brocku.ca

Ask Us Chat service

https://brocku.ca/library/chat/



**Book a Consultation** 

https://calendar.library.brocku.ca/appointments/researchconsultation

# Health Sciences

## HOME

BOOKS & BACKGROUND INFO

ARTICLES

THESES & DISSERTATIONS

WEBSITES

PUBLIC HEALTH

DATA & STATISTICS

NEWS

STREAMING VIDEO

SYSTEMATIC REVIEWS &

**EVIDENCE SYNTHESIS** 

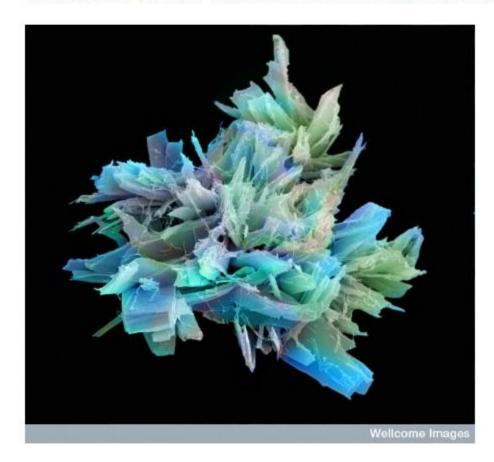
WRITING AND CITING

OFF-CAMPUS SERVICES

HELP AND TUTORIALS

HLSC 3P80

# Welcome to the Health Sciences Research Guide





## **Health Sciences**

HOME BOOKS & BACKGROUND INFO ARTICLES THESES & DISSERTATIONS WEBSITES PUBLIC HEALTH DATA & STATISTICS NEWS STREAMING VIDEO SYSTEMATIC REVIEWS & EVIDENCE SYNTHESIS WRITING AND CITING OFF-CAMPUS SERVICES HELP AND TUTORIALS HLSC 3P80

# Library Guide for HLSC 3P80

A Library course guide to help with resources, videos, tutorials, databases and strategies to be successful completing a rapid review.

This guide was created by Elizabeth Yates, and updated by Brock Library Teaching & Learning Librarian Ian Gordon.

Reach out if you need further assistance using the Brock Library key contacts page.

Ian Gordon's HLSC 3P80 Fall 2022 conversation (YouTube, 20:48)

HLSC 3P80 Evidence Synthesis Library Seminar February 15 2023 presentation slides (PDF)



PRISMA 2020 Word Flow Chart Generator template (Internet Archives copy)

https://prisma-statement.org has been acting up lately.

zoterobib

zotero

WordHippo database

MeSH Headings database (NLM)

Covidence database

Rapid Review Guidebook: Steps for Conducting a Rapid Review (Dobbins, 2017, PDF)

Systematic Review and Evidence Synthesis Guide (University of Minnesota Libraries)

How to Search the Literature: The Basics (Evidence Synthesis, McMaster University Health Sciences Library)

How to Search the Literature: Advanced (Evidence Synthesis, McMaster University Health Sciences Library)

What is evidence synthesis?

# EVIDENCE SYNTHESIS

- Synthesized evidence is considered:
  - ·less biased
  - more rigorous
  - more generalizable
- Hierarchy of pre-processed evidence

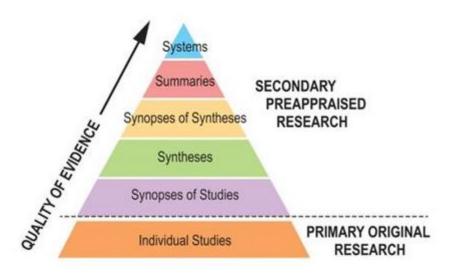


Image: https://libguides.lib.umanitoba.ca/c.php?g=297452&p=4467117



Image: Duke University Library https://guides.mclibrary.duke.edu/ebm/home

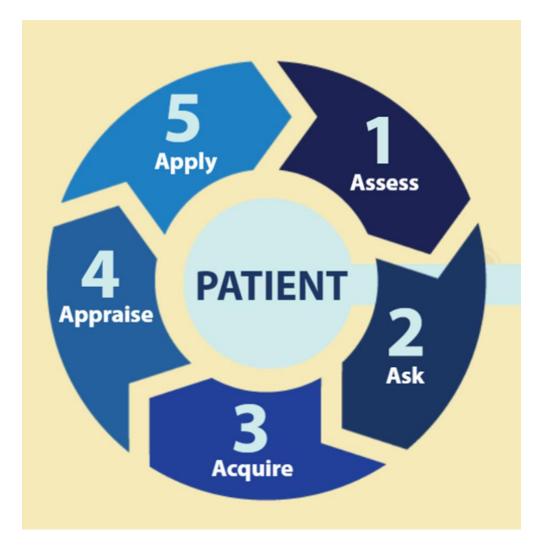


Image: Duke University Library https://guides.mclibrary.duke.edu/ebm/home

# STEPS IN EVIDENCE SYNTHESIS

Evidence synthesis generally involves these steps:

- Stating the objectives of the research
- Defining eligibility criteria for studies to be included and excluded
- Identifying (all) potentially eligible studies
- Screening for inclusion and exclusion
- Extracting data from the final set of screened studies
- Appraising the final set of studies
- Applying statistical analysis, if applicable
- Preparing a structured report of the research

### **Traditional Reviews**

- · Critical Review
- Integrative Review
- · Narrative Review
- · State of the Art Review

### **Review of Reviews**

- Umbrella Review
- Review of Reviews

# **Systematic Reviews**

- · Systematic Review
- Meta-analysis
- Comparative Effectiveness Review
- · Diagnostic Systematic Review
- · Network Meta-analysis
- · Prognostic Review
- · Psychometric Review
- · Review of Economic **Evaluations**
- SR of Epidemiology Studies

# **Rapid Reviews**

- · Rapid Review
- · Rapid Evidence Assessment
- Rapid Realist Review

# Review **Families**

## **Qualitative Reviews**

- Q Evidence Synthesis
- Q Interpretive Meta-synthesis
   Meta-Narrative Review
- Q Meta synthesis
- Framework Synthesis
- Meta aggregation

- Meta ethnography
- Meta-interpretation
- Meta-study
- Meta-summary
- Thematic Synthesis

### Mixed Method Reviews

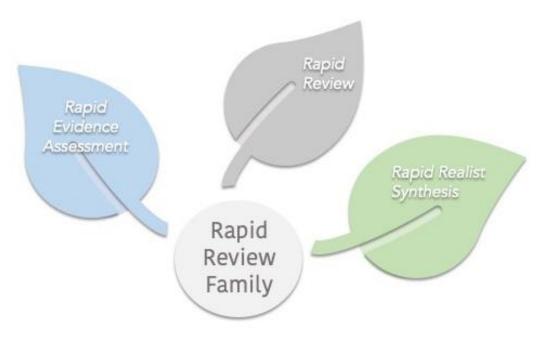
- Mixed Methods Synthesis
- Narrative Synthesis
- · Meta-narrative Review
- · Bayesian Meta -analysis
- · EPPI Centre Review
- Critical Interpretive Synthesis
- Realist Synthesis

# **Purpose Specific Reviews**

- · Scoping Review
- · Mapping Review
- · Systematised Review
- · Concept Synthesis
- · Expert Opinion Policy Review
- Technology Assessment Review
- · Methodological Review
- · Systematic Search and Review

Image: The University of Melbourne Library https://unimelb.libguides.com/whichreview

Reviews that are grouped within this family due to the abbreviated approach to the typical review methodology processes. This may include the search, appraisal and reporting so that the review is completed in a time-efficient manner to fit within project deadlines. (Moher et al., 2015).



# WHY ARE THEY MORE RAPID?

"a type of knowledge synthesis in which components of the systematic review process are simplified or omitted to produce information in a short period of time.."

May use:

- Very narrow research question
- Less sophisticated search strategies
- Search fewer sources
- Simple, descriptive quality appraisal



# Research Question

# Rapid Review

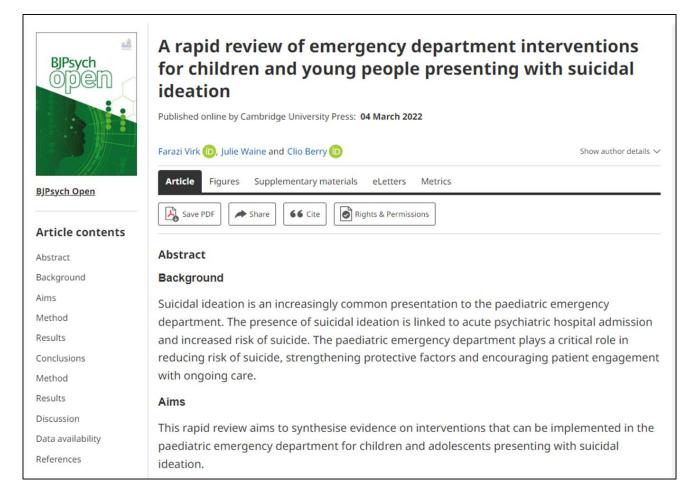




An example of a rapid review

Virk, F., Waine, J., & Berry, C. (2022). A rapid review of emergency department interventions for children and young people presenting with suicidal ideation. *BJPsych Open, 8*(2),

e56. https://doi.org/10.1192/bjo.2022.21



Virk, F., Waine, J., & Berry, C. (2022). A rapid review of emergency department interventions for children and young people presenting with suicidal ideation. BJPsych Open, 8(2), e56. https://doi.org/10.1192/bjo.2022.21



BJPsych Open (2022) 8, e56, 1-13. doi: 10.1192/bjo.2022.21



#### Review

## A rapid review of emergency department interventions for children and young people presenting with suicidal ideation

Farazi Virk, Julie Waine and Clio Berry

Suicidal ideation is an increasingly common presentation to the paediatric emergency department. The presence of suicidal ideation is linked to acute psychiatric hospital admission and increased risk of suicide. The paediatric emergency department plays a critical role in reducing risk of suicide, strengthening protective factors and encouraging patient engagement with ongoing care.

This rapid review aims to synthesise evidence on interventions that can be implemented in the paediatric emergency department for children and adolescents presenting with suicidal

Six electronic databases were searched for studies published since January 2010: PubMed, Web of Science, Medline, PsycINFO, CINAHL and Cochrane, Outcomes of interest included suicidal ideation, engagement with out-patient services, incidence of depressive symptoms, hopelessness, family empowerment, hospital admission and feasibility of interventions. The Cochrane risk-of-bias tool was used to evaluate the quality of studies.

Six studies of paediatric emergency department-initiated familybased (n = 4) and motivational interviewing interventions (n = 2)

were narratively reviewed. The studies were mainly small and of varying quality. The evidence synthesis suggests that both types of intervention, when initiated by the paediatric emergency department, reduce suicidal ideation and improve patient engagement with out-patient services. Family-based interventions also showed a reduction in suicidality and improvement in family empowerment, hopelessness and depressive symptoms.

Paediatric emergency department-initiated interventions are crucial to reduce suicidal ideation and risk of suicide, and to enhance ongoing engagement with out-patient services. Further research is needed; however, family-based and motivational interviewing interventions could be feasibly and effectively implemented in the paediatric emergency department setting

Suicide; suicidal ideation; management; emergency department; psychosocial interventions.

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access to appropriate resources. Suicide rates have increased in adolescents aged 15-19 years from 3.1 to 5.7/100 000 between 2010 and 2019 in the UK. Approximately 13% of 5- to 19-year-olds have at least one mental disorder,2,3 mental health presentations to a UK emergency care centre have increased threefold compared with 2019, and the most common reason for referral to Child and Adolescent Mental Health Services (CAMHS) in 13- to 17-yearolds was intentional overdose or self-harm.<sup>5</sup> In 2018, there were in-depth clinical assessment.<sup>5</sup> Studies have found that talking 204 suicides recorded in England and Wales in young people aged 10-19 years.4 Suicide denotes 'the act of intentionally ending one's life'.5 Mental health problems among children and young people appear to be increasing, as does suicidal ideation. Moreover, in early 2020, the COVID-19 pandemic began to place an additional significant burden on child mental health and have a substantial impact on psychosocial development.6 In Ireland, mental health attendances to the PED initially decreased by 26.8% during the first 4 months of the pandemic; by July and August, mental health presentations increased by 54.4% and 45.5% from September to December compared with 2019 data, highlighting and children and young people who died by suicide did not necesthe impact of COVID-19 on child mental health.7 Although the sarily express recent suicidal ideation.15 Unrecognised suicidal ideastrongest predictor for suicide remains a previous suicide attempt, tion may be a result of insufficient time to explore patient well-being

The paediatric emergency department (PED) plays an integral role first time go on to attempt suicide. 8.9 Consequently, it is imperative in ensuring children and adolescents at risk of suicide have timely to ensure that interventions offered to children and young people presenting to the PED are beneficial. Furthermore, the risk of a repeated suicide attempt is the highest during the first 6 months after a suicide attempt, which emphasises the importance of providing interventions that have a long-lasting effect, and of the need for robust follow-up post-discharge from the PED. 10,11

A presentation of suicidal ideation has been considered as the most important sign of short-term suicide risk and warrants an about suicide does not inadvertently create risk, and may lead to a reduction in distress in individuals who are experiencing suicidal thoughts.12 However, suicidal intent is difficult to measure, and a proportion of suicides occur as a result of individuals misjudging the risk.5 Children understand the concept of suicide and death as permanent by 8 years of age; 13 nevertheless, clinicians must sensitively assess suicidal cognitions in children by in the context of rapport and empathy, within an open discussion centred around patient well-being. Worryingly, 25% of patients presenting to the PED who did not declare suicidal thoughts had suicidal ideation.14 a third of adolescents who experience suicidal ideation for the or a lack of mental health training for emergency department

Farazi Virk, Julie Waine, Clio Berry. A rapid review of emergency department interventions for children and young people presenting with suicidal ideation. PROSPERO 2021 CRD42021225364 Available from:

https://www.crd.york.ac.uk/prospero/display\_record.php?ID=C RD42021225364

#### Condition or domain being studied

Suicidal ideation presentations in children and adolescents to the paediatric emergency department.

### Participants/population [1 change]

#### Inclusion Criteria

- Children and adolescents aged 6-19 years.
- At least 25% patients recruited from PED.

#### **Exclusion Criteria**

- Children aged under 6 years
- Adults aged 18 years and over

#### Intervention(s), exposure(s) [1 change]

#### Inclusion

Psychological/Psychosocial/non-pharmacological interventions targeting suicidality.

#### Exclusion

Pharmacological interventions.

### Comparator(s)/control [1 change]

Inclusion - Any comparator, including TAU.

#### Exclusion - No comparator

#### Main outcome(s) [1 change]

- Suicidal ideation, depressive symptoms, hopelessness, family empowerment and/or hospitalisation.
- And/or the feasibility of the intervention.
- And/or outpatient services and follow-up treatment.



#### **PROSPERO**

#### International prospective register of systematic reviews



# A rapid review of emergency department interventions for children and young people presenting

with suicidal ideation Farazi Virk, Julie Waine, Clio Berry

Farazi Virk, Julie Waine, Clio Berry. A rapid review of emergency department interventions for children and young people presenting with suicidal ideation. PROSPERO 2021 CRD42021225364 Available from: https://www.crd.york.ac.uk/prospero/display record.php?ID=CRD42021225364

#### Review question [1 change]

A rapid review of emergency department interventions for children and young people presenting with suicidal

Population - Children and adolescents aged 6-19 years.

- At least 25% patients recruited from PED.

Intervention - Psychological/Psychosocial/non-pharmacological interventions targeting suicidality.

Comparator - Any comparator, including TAU.

Outcomes - Suicidal ideation, depressive symptoms, hopelessness, family empowerment and/or hospitalisation.

- And/or the feasibility of the intervention.
- And/or outpatient services and follow-up treatment.

Study Design - Randomised Controlled Trials (RCTs)

- Full text in the English language

Setting - Intervention deployed in clinical setting.

- Any country.

#### Searches [1 change]

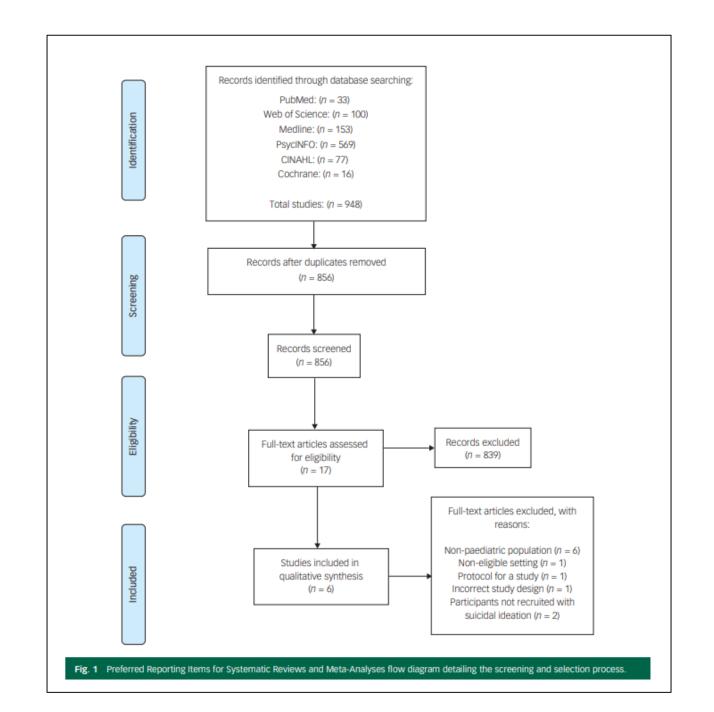
A comprehensive search of six databases was undertaken for full-text articles published in a variety of journals. The following databases were analysed: PubMed, Web of Science, MEDLINE, PsycINFO, CINAHL and Cochrane Library, RCTs published in the English Language between January 2010 to December 2020 as a full-text article will be included.

#### Types of study to be included [2 changes]

Randomised controlled trials

#### Condition or domain being studied

Suicidal ideation presentations in children and adolescents to the paediatric emergency department.



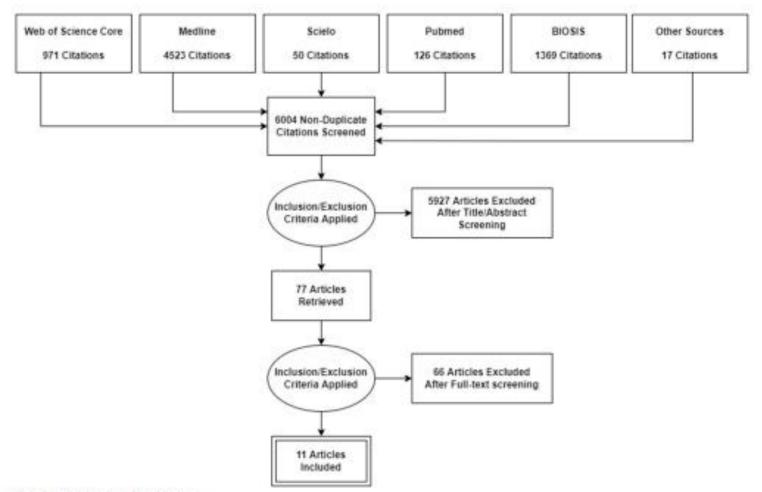
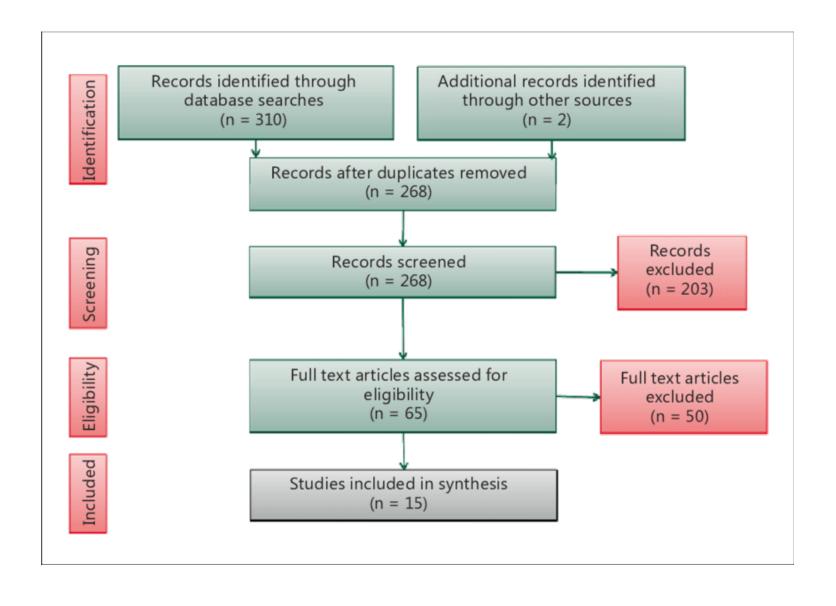
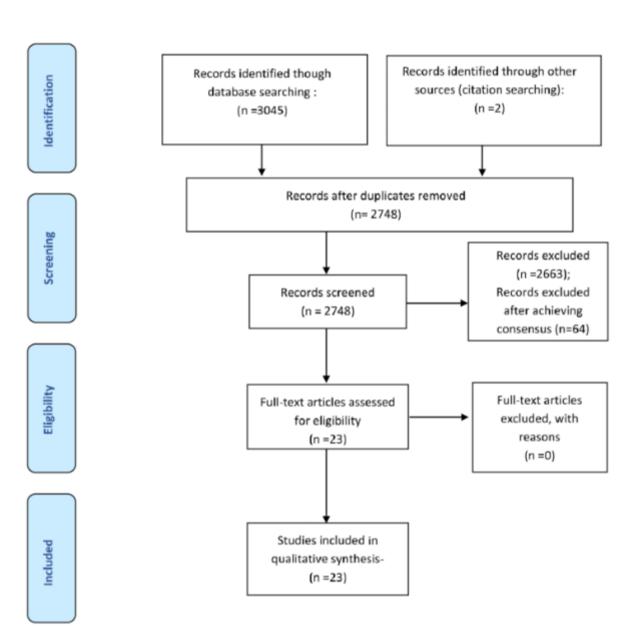


Fig. 1 Flowchart of study selection





	Inclusion criteria	Exclusion criteria
Population	Children and adolescents aged 6–19 years	
	At least 25% patients recruited from the paediatric emergency department	
Intervention	Psychological/psychosocial/non-pharmacological interventions targeting suicidality	Pharmacological interventions
Comparator	Any comparator, including treatment as usual	
Outcomes	Suicidal ideation, depressive symptoms, hopelessness, family empowerment and/or hospital admission	
	And/or the feasibility of the intervention	
	And/or out-patient services and follow-up treatment	
Study design	Randomised controlled trials	Non-randomised controlled trials
	Full text in the English language	Non-English language
		Published before January 2010
Setting	Intervention deployed in clinical setting	Interventions deployed outside clinical
	Any country	settings

uthors (year), country	Target population	Design	Participants	Intervention(s)	Control condition	Outcomes post- intervention	Outcomes at follow-up	Outcome measur overall result and follow-up
sarnow et al (2011), California, USA <sup>53</sup> Click or tap here to enter text.	Inclusion: 'Presenting with suicide attempt and/or suicidal ideation.'  Exclusion: 'Acute psychosis/ symptoms impeding consent/assessment; no parent/guardian to consent, youth non English speaking, parents/guardians non English or Spanish speaking.'  Recruited from: PED	RCT	Sample N = 181, age range 10–18 years, treatment group n = 89, control group n = 92	FISP in emergency department designed to increase motivation for follow-up treatment and safety supplemented by telephone contacts after discharge.  Delivered by: FISP clinicians. Clinicians with graduate mental health training received didactic training until certified proficient.	EUC: staff received one training session	health treatment: FISP patients	and five received enhanced	Primary outcom- linking patien to out-patien mental health treatment an suicidality Exploratory outcomes: depression Overall: effective linking youth follow-up car and no statistically significant eff on suicidality Follow-up: 2 more
amond et al (2010), Philadelphia, USA <sup>49</sup> Click or tap here to enter text.	Inclusion: 'Adolescents who scored >31 on the SIQ and above 20 on the BDI-II.'  Exclusion: 'Adolescents needing psychiatric hospitalisation, recently discharged from a psychiatric hospital, current psychosis or mental retardation or history of borderline intellectual functioning.'  Recruited from: Primary care (75%) and PED (25%)	RCT	Sample N = 66, age range 12– 17 years, treatment group n = 35, control group n = 31	his/her parent(s) when contemplating suicide. Followed by a session for the adolescent to identify	referral process with ongoing monitoring. Other	Suicidal ideation: Not reported at post-intervention Depressive symptoms: Not reported at post-intervention	Suicidal ideation: 24 weeks, 82.1% of ABFT participants and 46.2% of EUC participants reported no suicidal ideation in the past week (odds ratio 5.37, 95% CI 1.56–18.49, $\chi$ 2(1) = 7.66, $P$ = 0.006)  Depressive symptoms: 24 weeks follow-up, 58.1% of ABFT participants and 38.5% of EUC participants reported non-clinical depression scores (odds ratio 2.21, 95% CI 0.76–6.42, $\chi$ 2(1) = 2.17, $P$ = 0.14)	showed a sli higher rate of improvement suicidal idea The intervent group showed significant improvement

Table 1 Characteristics of included studies

Study ID	Country	Study design	Study quality	Duration	Population age (years)	Sample size (females)	PHE	Outcome	Mechanisms underlying the effect of PHE on outcomes
Rashid and Michaud [36]	Bangladesh	Qualitative design using face-to-face in-depth interviews and informal discus- sions	Some concerns	1998	15-19	9	Flood	Sexual and repro- ductive health (privacy to bathe, use latrine, and maintain good menstrual hygiene)	Limited access to health services Disruption of social network Sharing a private space, like toilets and bathrooms, with men
Zulaika et al. [37]	Kenya	Panel data self- administered survey	High	May 2018 – March 2021	13-17	910	COMD-19	Sexual and repro- ductive health (pregnancy and sexual debut)	Closure of schools Disruption in school- ing due to lockdown Reduction in house- hold income
Temple et al. [38]	The United States	Cross-sectional face-to-face risk behaviour survey	Low	March 2009	14-18	584 447 (final sample)	Hunicane	Physical and sexual violence by a boy- friend	Intensity of exposure to traumatic stressor Substance abuse
Sloand et al. [39]	Haiti	Cross-sectional audio computer- based interviews	Some concerns	2011-2013	12-17	78	Earthquake	Dating violence by boyfriend or ex-boyfriend and domestic violence by a family member	Low levels of educa- tion Young age Umited access to mental health services Social norms around intimate partner violence (PV)
Cema-Turoff et al. [40]	Haiti	Gross-sectional face-to-face house- hold survey	High	2012	13-17	1,457	Earthquake	Physical, emotional, and sexual violence by a family or non- family member	Not reported
Epstein et al. [41]	19 Sub-Saharan African countries	Repeated face-to- face cross-sectional survey	High	2011-2018	15-19	5,316	Drought	Physical, emotional, and sexual violence by intimate partner	Young age Lower social standing and inexperience with relationships financial strain and food insecurity Stress and poor men- tal health conditions Disempowerment, unemployment, and economic depend- ence on partner

### **Outcomes of interventions**

Suicidal ideation

Five studies examined the impact of interventions on suicidal ideation, and outcome measures varied across studies. 48,49,51-53 One study measured suicidal ideation with the Harkavy-Asnis Suicide Scale, to assess active and passive suicidal ideation.<sup>53</sup> Three studies used the Suicidal Ideation Questionnaire-Junior to assess suicidal ideation. 48,51,52 One study measured change over time in adolescent suicidality (Reasons for Living Inventory for Adolescents; RFL-A).48 Asarnow et al evaluated suicidality as an exploratory outcome; results illustrated no statistically significant intervention effects on suicidality.53 In the motivational interviewing intervention by Grupp-Phelan et al, there was a significant decrease in suicidal ideation across groups. 52 Diamond et al found a slightly higher rate of improvement owing to a rapid reduction in suicidal ideation in the ABFT intervention group compared with the control group. 49 At the end of the follow-up period, 82.1% of participants receiving the intervention reported no suicidal ideation in the past week compared with 46.2% of enhanced usual care (EUC) participants. 49 Over the 6-month follow-up period, four out of 35 intervention group participants (11.4%) had made a suicide attempt, compared with seven out of 33 (21.2%) EUC participants. 49 King et al reported a significant decrease in time for suicidal ideation over the study period.51 Wharff et al reported increases in the mean RFL-A total scores over the study period; however, there were no significant differences between the groups.48 This intervention illustrated that participants had lower levels of suicidality over time at 1-month follow-up compared with their baseline assessment.48

### Depressive symptoms and hopelessness

Three studies explored the impact of the intervention on depressive symptoms. 49,51,52 Diamond et al measured depression with the self-report Beck Depression Inventory, and results showed significant effects supported by large effect sizes. 49 After treatment, at 6-month follow-up, 54.8% of ABFT participants and 31.0% of EUC participants had non-clinical depression scores. 49 The Reynold

### Engagement with out-patient services

Two studies investigated the impact of interventions on engagement with out-patient services and treatment initiation. <sup>52,53</sup> Grupp-Phelan et al explored treatment initiation and attendance. Exploratory outcomes showed no significant difference between the STAT-ED intervention and EUC in the rate of mental health appointments at 2-month follow-up. <sup>52</sup> However, by 6 months, follow-up participants in the STAT-ED group were more likely to initiate mental health treatment and the overall rate of mental health appointments were significantly higher in the STAT-ED group compared with EUC. <sup>52</sup> Asarnow et al intervention included a telephone contact within 48 h of discharge from the PED, to motivate and support out-patient treatment. <sup>53</sup> More FISP participants were likely to receive out-patient treatment and had significantly more visits compared with the control. <sup>53</sup>

### Family empowerment

In one study, family empowerment was measured as an outcome. 
Scores were obtained with a 34-item self-report Family Empowerment Scale (FES) that measures the level of empowerment of parents of a child with emotional difficulties. 
The FES questionnaire is completed by parents to assesses family, child and parental involvement within the community. Parents answer questions such as I feel I am a good parent, I make sure I stay in regular contact with professionals who are providing my child services and I have ideas about the ideal service system for children. 
The scoring scale is rated 1–5; I equates to 'never' and 5 to 'very often'. 
Wharff et al reported higher scores for family empowerment during the study. 
At the 1-month follow-up, there were statistically significant increases in the FES score.

### Hospital admission

One study evaluated the impact of the intervention on in-patient psychiatric hospital stay. The FBCI demonstrated that participants randomised to the intervention were significantly less likely to be admitted to hospital compared with treatment as usual. During the study, 68% of treatment-as-usual participants were admitted to hospital, compared with only 38% of FBCI participants.

## Discussion

This rapid review aimed to investigate interventions used in the PED setting for children and adolescents presenting with suicidal ideation. Six studies met the review inclusion criteria. All studies were initiated in the PED. The studies provided evidence for the impact of these interventions on suicidal ideation. Studies also outlined positive effects of interventions on patient engagement with out-patient follow-up treatment, depressive symptoms, hopelessness, family empowerment, hospital admission and intervention feasibility. To our knowledge, our study is the most recent and first rapid review to focus on a broad range of outcome measures to support PED care for young people presenting with suicidal ideation, as well as to identify areas requiring further research.

Two potential interventions were identified in this review; four studies involved family-based interventions and two studies comprised motivational interviewing interventions. 48–53 Overall, findings suggest that family-based interventions are associated with a reduction in suicidal ideation, whereas evidence for the benefit of motivational interviewing is more equivocal. Overall, there is a lack of high-quality evidence because several limitations within the included studies, and therefore the conclusions should be drawn with caution.

Included studies that investigated the effects of family-based interventions on suicidal ideation consisted of dedicated sessions with families and patients in the PED to strengthen family bonds during a time of crisis. This is in keeping with a clinical review that highlighted early involvement of the family, formulation of

## References

- 1 Office for National Statistics. Suicides in England and Wales. Office for National Statistics, 2021 (https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/suicidesintheunitedkingdomreferencetables).
- 2 The Lancet. Child mental health services in England: a continuing crisis. Lancet 2020; 395(10222): 389.
- 3 McCall B. Threefold Rise in Mental Health Referrals from Paediatric Emergency during COVID-19. Medscape, 2021 (https://www.medscape.com/viewarticle/ 953755).
- 4 Office for National Statistics. Number of Suicides by Single Year of Age, England and Wales, 2018 Registrations. Office for National Statistics, 2019 (https:// www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/ deaths/adhocs/10941numberofsuicidesbysingleyearofageenglandandwales 2018registrations).
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- 6 Singh S, Roy D, Sinha K, Parveen S, Sharma G, Joshi G. Impact of COVID-19 and lockdown on mental health of children and adolescents: a narrative review with recommendations. *Psychiatry Res* 2020; 293: 113429.
- 7 McDonnell T, Barrett M, McNicholas F, Barrett E, Conlon C, Cummins F, et al. Increased mental health presentations by children aged 5–15 at emergency departments during the first 12 months of COVID-19. Ir Med J 2021; 114(5): 356.
- 8 Nock MK, Borges G, Bromet EJ, Alonso J, Angermeyer M, Beautrais A, et al. Cross-national prevalence and risk factors for suicidal ideation, plans and attempts. Br J Psychiatry 2008; 192(2): 98–105.
- 9 Inagaki M, Kawashima Y, Yonemoto N, Yamada M. Active contact and followup interventions to prevent repeat suicide attempts during high-risk periods among patients admitted to emergency departments for suicidal behavior: a systematic review and meta-analysis. BMC Psychiatry 2019; 19: 44.

So why is evidence synthesis so important to health sciences research?

HLSC 3P80 FW 2021/2022 D3

#### RAPID REVIEW PAPER

The final paper is to be a rapid review style, which is a systematic-type of literature review following the PRISMA guidelines.

Format Guidelines: Include a cover page with your name, student number, course code, and the date and title of the assignment (Create a title specific to your topic and include "rapid review"). Be professional (avoid fancy graphics/font/etc.). Papers should use double-spaced, include page numbers, use 12pt Times New Roman font, and with 2 to 2.54 cm margins on all sides. Paragraphs and section headers must be used to organize the paper. References must follow APA format guidelines (both in-text citations and reference list). Figure and table titles are required. Marks will be deducted if format guidelines are not followed.

Style Guidelines: In addition to above format guidelines and the PRISMA guidelines (below), students are graded based on writing style. Proper spelling, grammar, punctuation, formal and scholarly language (e.g., no slang or contractions), and full sentences (no bullet points) are expected. Writing needs to be clear and understandable, and ideas should be organized in a logical manner.

Brock A-Z Learning Services has online writing assistance and APA Referencing Workshops, if needed: https://brocku.ca/student-life-success/learning-services/

This paper is an individual effort (independence of work is expected). Students are expected to follow all guidelines for proper citations, etc. consistent with meeting academic integrity. Students are required to submit their papers to **Turnitin.com** phrase-matching software. If you object to uploading your assignment to Turnitin.com, please notify the instructor to discuss alternatives.

#### What are the PRISMA Guidelines?

"PRISMA" refers to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). PRISMA is an evidence-based minimum set of items to help authors improve the reporting of systematic reviews and meta-analyses. PRISMA focuses on the reporting of reviews evaluating randomized trials, but can also be used as a basis for reporting systematic reviews of other types of research. The guidelines help to ensure transparent and complete reporting of this type of research and provide a structure and guide for authors (such as you!).

The checklist includes 27 items pertaining to the content of a systematic review and metaanalysis, which include the title, abstract, methods, results, discussion, and funding. We will be adapting the checklist for our purposes, as you are to write a Rapid Review (which is a systematic-type of review but not a 'Systematic Review', in that is uses a transparent methodology but is streamlined, in comparison) and you are not required to do a Metaanalyses.

**CONTENT:** All indicated components of the PRISMA Checklist (**See Attached**) must be included and are worth the corresponding mark indicated. All papers <u>must</u> include a results table and flow diagram (as per PRISMA guidelines). Crossed-out sections of the PRISMA guidelines are <u>not</u> required for this course. Notes (in blue) have been added to the standardized checklist by the instructor in order to help clarify the guidelines and marking criteria.



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Randomised trials	CONSORT	Extensions
Observational studies	STROBE	Extensions
Systematic reviews	PRISMA	Extensions
Study protocols	<u>SPIRIT</u>	PRISMA-P
Diagnostic/prognostic studies	STARD	TRIPOD
Case reports	CARE	Extensions
Clinical practice guidelines	<u>AGREE</u>	<u>RIGHT</u>
Qualitative research	SRQR	COREQ
Animal pre-clinical studies	<u>ARRIVE</u>	

SQUIRE

Extensions

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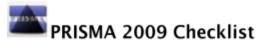






See all 555 reporting guidelines

Quality improvement studies



Section/topic	#	Checklist item	Pg
ITLE (+ Format/Style (	Guideli	nes [as per above] /10)	
Title	1	Identify the report as a systematic review, meta-analysis, or both. – Your paper is to be a Rapid Review. Create a title specific to your paper (be creative!) and include in the title that it is a Rapid Review.	
ABSTRACT /10	•		
Structured summary	2	Provide a structured summary including, <u>as applicable</u> : background; objectives; data sources; study eligibility criteria, participants, and interventions (may not apply); study appraisal <del>and synthesis methods</del> ; results; limitations; conclusions and implications of key findings; <del>systematic review registration number.</del> A 'structured summary' means an Abstract with subtitles (e.g., Background, Objectives, Methods, Results, Conclusions)	
INTRODUCTION /10			
Rationale	3	Describe the rationale for the review in the context of what is already known. (e.g., why is the review needed for your research question? Why is the topic important? Note: you can draw on sources other than articles included in your review for introduction material, if needed [they must still be appropriate sources and referenced appropriately]) You likely have some of this component from your research proposal.	
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions (or exposure, if no intervention), comparisons, outcomes, and study design (PICOS). (i.e., this part is to conduct a rapid review of the literature on your research question – state your research question)	
METHODS /30		Methods will be outlining <b>how</b> you will do or did the Review.	
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number. Not applicable.	
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale for the criteria used. What types of studies are you going to include or not include?	
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched. What are you searching and what was the last date that you searched these sources? (ie what databases? Hand searching of reference lists? etc)	
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated. (i.e., indicate your search string)	
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta analysis). (ie how did you screen studies that resulted from the search to determine which me your eligibility criteria and to come to the ones that are included in your review?)	



# PRISMA 2009 Checklist

Section/topic	ection/topic # Checklist item		pg#			
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators. (this component would typically have 2 or more individuals independently searching and sometime includes contacting investigators – yours will not, so it's fairly simple)				
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made. (i.e., what results, variables, and/or study characteristics are you pulling from the articles to report? [eg in your table])				
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis. (i.e. how will you assess the risk of bias in the studies? consider biases related to study design, sample/recruitment procedures, generalizability of sample, group assignment [randomization, blinding], measurement biases, confounding, funding, length of follow-up, etc.]				
Summary measures	<del>13</del>	State the principal summary measures (e.g., risk ratio, difference in means).				
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I <sup>2</sup> ) feach meta analysis.				
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies, language bias, etc.).				
Additional analyses	<del>16</del>	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.				
Results are now what you	four	low diagram and results summary table (NOTE: report results in the table and diagram AND describe them in the written paper).  In the diagram and results summary table (NOTE: report results in the table and diagram AND describe them in the written paper).  In the diagram and results summary table (NOTE: report results in the table and diagram AND describe them in the written paper).  In the diagram and results summary table (NOTE: report results in the table and diagram AND describe them in the written paper).  In the diagram and results summary table (NOTE: report results in the table and diagram AND describe them in the written paper).				
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a <b>flow diagram</b> . (Results of your search – how many results, how many screened, how many excluded and way, etc. You must include a flow diagram, and outline this in your written discussion).				
Study characteristics	18					
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12). (assess each study risk of bias – see item 12 methods for examples to consider; describe strengths/limitations of <b>individual</b> studies and commonalities in these individual study risk of biases across them)				
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot. (ie what did the studies find in answer to your research question?)				
Synthesis of results	21	Present results of each meta analysis done, including confidence intervals and measures of consistency.				



# PRISMA 2009 Checklist

	T				
Risk of bias across	,				
studies		of articles be biased? Are certainly results more likely to be included?)			
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).			
DISCUSSION /15 (e.g., a	nswe	er to your research question; overall main conclusions and limitations or gaps identified in research reviewed; next steps/future			
research; limitations of y	our ra	apid review)			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers). (overall – what did your rapid review find? What doe these studies say in answer to your research question? And what is the strength of this evidence available? What is the relevance – ie what do these results mean to those who could use this evidence?)			
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias). (i.e., limitations overall of the studies that you reviewed, AND potential limitations of your rapid review – think about if/how our rapid review might have missed key evidence and why? Think about what makes a rapid review 'rapid' relative to a Systematic Review?)			
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.  (sum up what the evidence says and means; what are implications for future research based on limitations identified in the research)			
FUNDING					
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.			

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(6): e1000097. doi:10.1371/journal.pmed1000097

For more information, visit: www.prisma-statement.org.



# Research Question

# Rapid Review

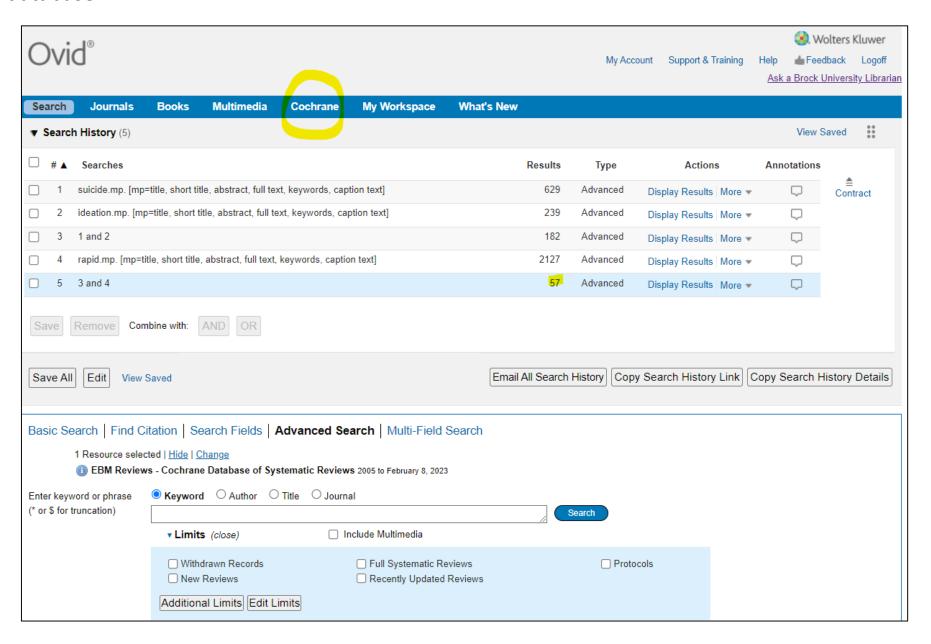


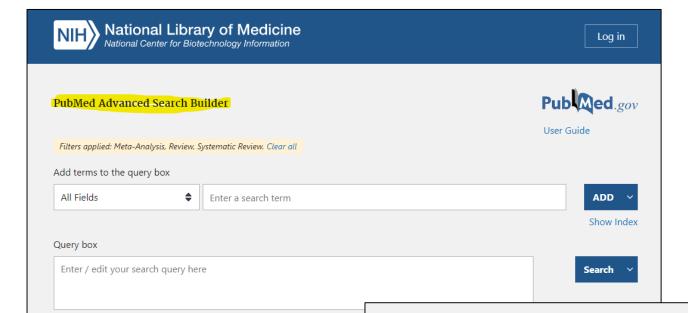
eligibility / bias / validity / limitations / impact



Has your research question been analyzed using evidence synthesis frameworks or as part of a rapid review protocol?

### Cochrane database





### MEDLINE via PubMed database

History and Search Details						
Actions	Details	Query	Results	Time		
•••	>	Search: #8 and #9 Filters: Meta-Analysis, Review, Systematic Review	22	10:50:21		
•••	>	Search: rapid[Title] Filters: Meta-Analysis, Review, Systematic Review	5,278	10:49:53		
•••	>	Search: #7 and #3 Filters: Meta-Analysis, Review, Systematic Review	2,360	10:49:31		
•••	>	Search: #6 or #5 or #4 Filters: Meta-Analysis, Review, Systematic Review	12,918	10:49:15		
•••	>	Search: suicide Filters: Meta-Analysis, Review, Systematic Review	12,918	10:48:13		
•••	>	Search: suicide Filters: Review, Systematic Review	12,569	10:48:08		
•••	>	Search: suicide Filters: Review	11,621	10:48:03		
•••	>	Search: suicide	113,570	10:47:42		
•••	>	Search: <b>#1 and #2</b>	20,971	10:47:22		
•••	>	Search: ideation	23,074	10:46:53		
	Actions	Actions         Details            >            >            >            >            >            >            >            >	Actions Details Query  Search: #8 and #9 Filters: Meta-Analysis, Review, Systematic Review  Search: rapid[Title] Filters: Meta-Analysis, Review, Systematic Review  Search: #7 and #3 Filters: Meta-Analysis, Review, Systematic Review  Search: #6 or #5 or #4 Filters: Meta-Analysis, Review, Systematic Review  Search: suicide Filters: Meta-Analysis, Review, Systematic Review  Search: suicide Filters: Review, Systematic Review  Search: suicide Filters: Review  Search: suicide Filters: Review  Search: suicide Filters: Review  Search: suicide Filters: Review  Search: suicide	Actions Details Query Results		

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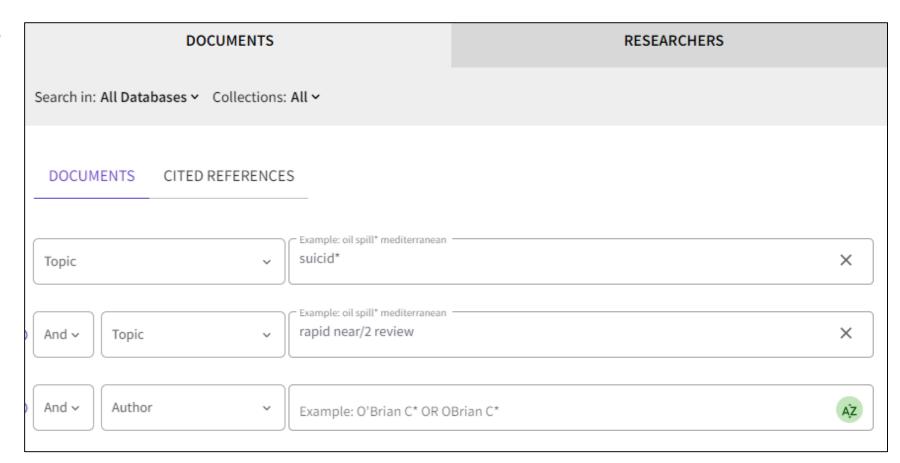
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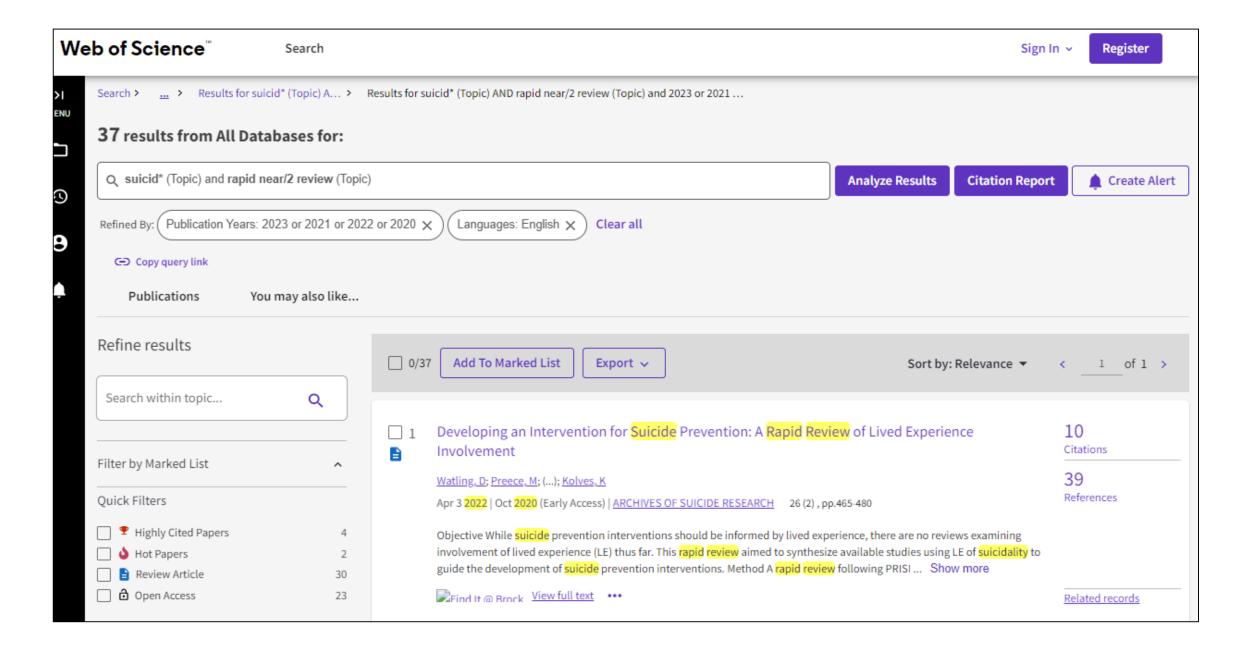
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## A rapid review of emergency department interventions for children and young people presenting with suicidal ideation

By: Virk, F (Virk, Farazi) [1]; Waine, J (Waine, Julie) [2]; Berry, C (Berry, Clio) [1]

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#### BJPSYCH OPEN

Volume: 8 Issue: 2

Article Number: e56; PII S2056472422000217

DOI: 10.1192/bjo.2022.21 Published: MAR 4 2022 Indexed: 2022-03-21 Document Type: Review

#### Abstract

Background Suicidal ideation is an increasingly common presentation to the paediatric emergency department. The presence of suicidal ideation is linked to acute psychiatric hospital admission and increased risk of suicide. The paediatric emergency department plays a critical role in reducing risk of suicide, strengthening protective factors and encouraging patient engagement with ongoing care. Aims This rapid review aims to synthesise evidence on interventions that can be implemented in the paediatric emergency department for children and adolescents presenting with suicidal ideation. Method Six electronic databases were searched for studies published since January 2010: PubMed, Web of Science, Medline, PsycINFO, CINAHL and Cochrane.

Outcomes of interest included suicidal ideation, engagement with out-patient services, incidence of depressive symptoms, hopelessness, family empowerment, hospital admission and feasibility of interventions. The Cochrane risk-of-bias tool was used to evaluate the quality of studies. Results Six studies of paediatric emergency department-initiated family-based (n = 4) and motivational interviewing interventions (n = 2) were narratively reviewed. The studies were mainly small and of varying quality. The evidence synthesis suggests that both types of intervention, when initiated by the paediatric emergency department, reduce suicidal ideation and improve patient engagement with out-patient services. Family-based interventions also showed a reduction in suicidality and improvement in family empowerment, hopelessness and depressive symptoms. Conclusions Paediatric emergency department-initiated interventions are crucial to reduce suicidal ideation and risk of suicide, and to enhance ongoing engagement with out-patient services. Further research is needed; however, family-based and motivational interviewing interventions could be feasibly and effectively implemented in the paediatric emergency department setting.

#### Keywords

Author Keywords: Suicidal ideation; management; emergency department; psychosocial interventions

Keywords Plus: MENTAL-HEALTH; SELF-HARM; YOUTH SUICIDE; ADOLESCENTS; PREVENTION; RISK; PREVALENCE; BEHAVIORS; TIME; CARE





#### Review

### A rapid review of emergency department interventions for children and young people presenting with suicidal ideation

Farazi Virk, Julie Waine and Clio Berry

Suicidal ideation is an increasingly common presentation to the paediatric emergency department. The presence of suicidal ideation is linked to acute psychiatric hospital admission and increased risk of suicide. The paediatric emergency department plays a critical role in reducing risk of suicide, strengthening protective factors and encouraging patient engagement with ongoing care.

This rapid review aims to synthesise evidence on interventions that can be implemented in the paediatric emergency department for children and adolescents presenting with suicidal

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were narratively reviewed. The studies were mainly small and of varying quality. The evidence synthesis suggests that both types of intervention, when initiated by the paediatric emergency department, reduce suicidal ideation and improve patient engagement with out-patient services. Family-based interventions also showed a reduction in suicidality and improvement in family empowerment, hopelessness and depressive symptoms.

Paediatric emergency department-initiated interventions are crucial to reduce suicidal ideation and risk of suicide, and to enhance ongoing engagement with out-patient services. Further research is needed; however, family-based and motivational interviewing interventions could be feasibly and effectively implemented in the paediatric emergency department setting.

Suicide; suicidal ideation; management; emergency department; psychosocial interventions.

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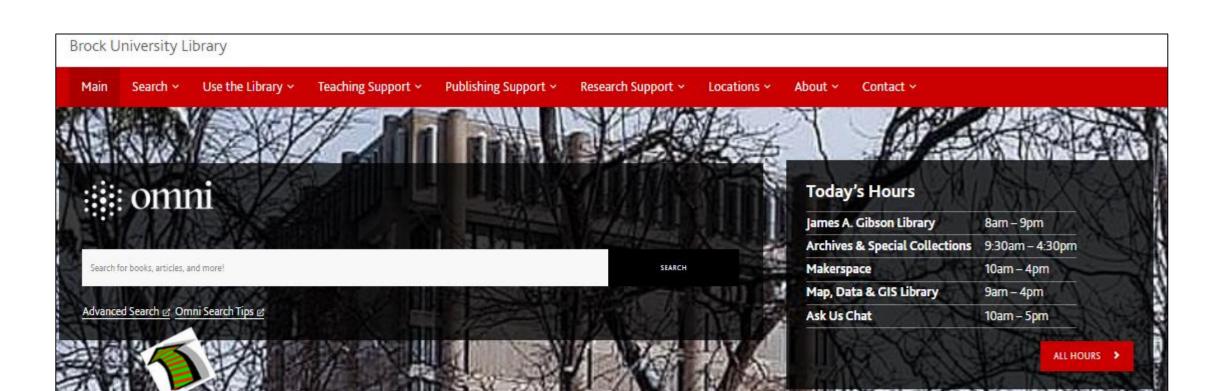
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The paediatric emergency department (PED) plays an integral role in ensuring children and adolescents at risk of suicide have timely access to appropriate resources. Suicide rates have increased in adolescents aged 15-19 years from 3.1 to 5.7/100 000 between 2010 and 2019 in the UK. Approximately 13% of 5- to 19-year-olds have at least one mental disorder;2,3 mental health presentations to a UK emergency care centre have increased threefold compared with 2019, and the most common reason for referral to Child and Adolescent Mental Health Services (CAMHS) in 13- to 17-yearolds was intentional overdose or self-harm.<sup>5</sup> In 2018, there were in-depth clinical assessment.<sup>5</sup> Studies have found that talking 204 suicides recorded in England and Wales in young people aged 10-19 years.4 Suicide denotes 'the act of intentionally ending one's life'.5 Mental health problems among children and young people appear to be increasing, as does suicidal ideation. Moreover, in early 2020, the COVID-19 pandemic began to place an additional significant burden on child mental health and have a substantial impact on psychosocial development.<sup>6</sup> In Ireland, mental health attendances to the PED initially decreased by 26.8% during the first 4 months of the pandemic; by July and August, mental health presentations increased by 54.4% and 45.5% from September to December compared with 2019 data, highlighting the impact of COVID-19 on child mental health.2 Although the strongest predictor for suicide remains a previous suicide attempt, tion may be a result of insufficient time to explore patient well-being

first time go on to attempt suicide. 8.9 Consequently, it is imperative to ensure that interventions offered to children and young people presenting to the PED are beneficial. Furthermore, the risk of a repeated suicide attempt is the highest during the first 6 months after a suicide attempt, which emphasises the importance of providing interventions that have a long-lasting effect, and of the need for robust follow-up post-discharge from the PED. 10,11

A presentation of suicidal ideation has been considered as the most important sign of short-term suicide risk and warrants an about suicide does not inadvertently create risk, and may lead to a reduction in distress in individuals who are experiencing suicidal thoughts.12 However, suicidal intent is difficult to measure, and a proportion of suicides occur as a result of individuals misjudging the risk.5 Children understand the concept of suicide and death as permanent by 8 years of age; 13 nevertheless, clinicians must sensitively assess suicidal cognitions in children by in the context of rapport and empathy, within an open discussion centred around patient well-being. Worryingly, 25% of patients presenting to the PED who did not declare suicidal thoughts had suicidal ideation,14 and children and young people who died by suicide did not necessarily express recent suicidal ideation. 13 Unrecognised suicidal ideaa third of adolescents who experience suicidal ideation for the or a lack of mental health training for emergency department

Virk, F., Waine, J., & Berry, C. (2022). A rapid review of emergency department interventions for children and young people presenting with suicidal ideation. BJPsych Open, 8(2), e56. https://doi.org/10.1192/bjo.2022.21





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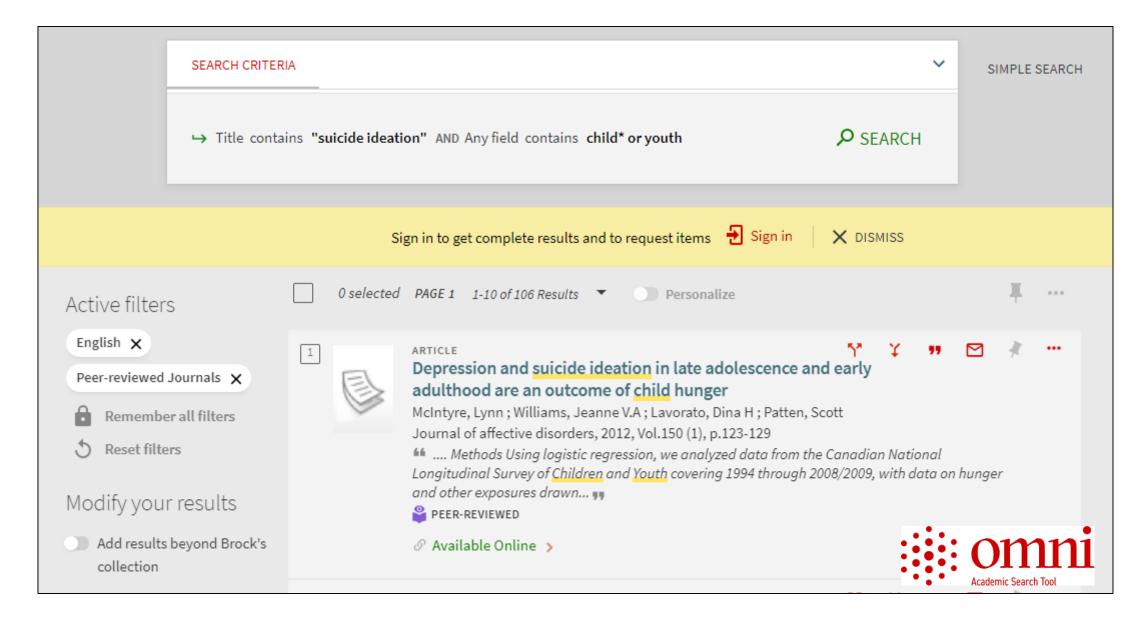


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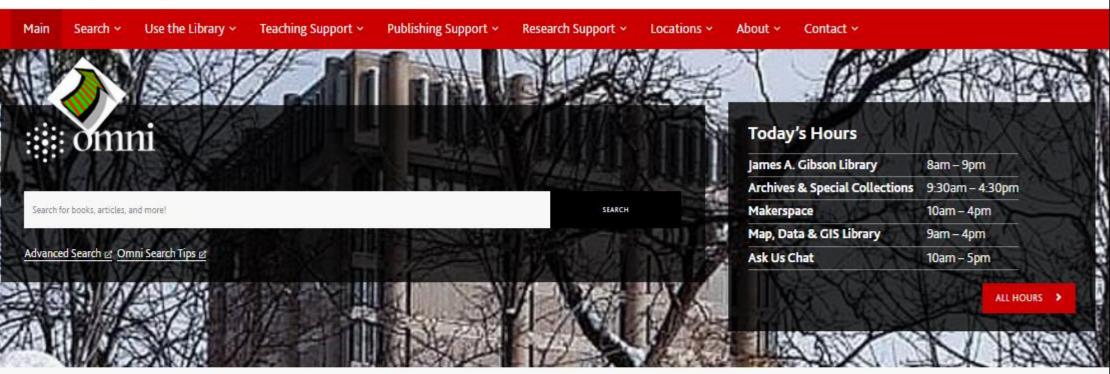


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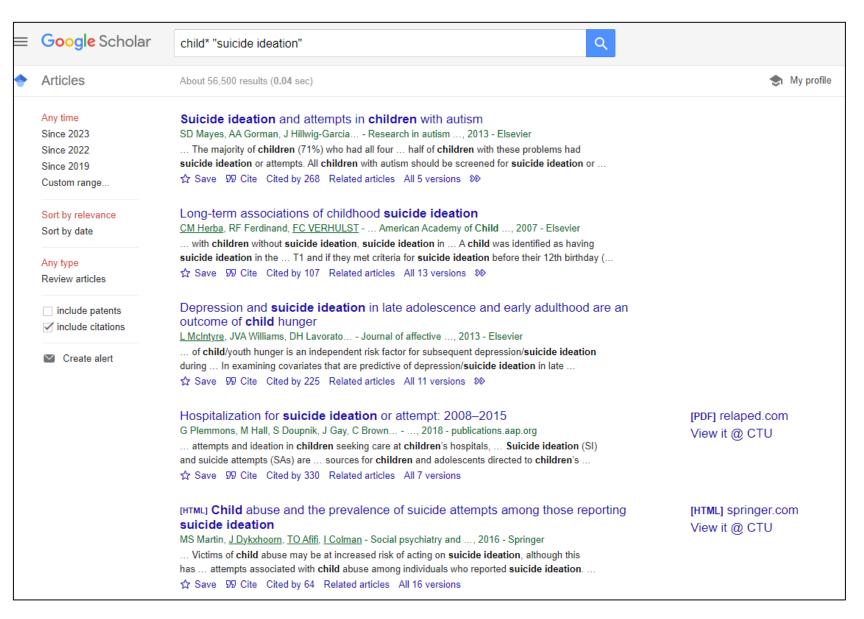


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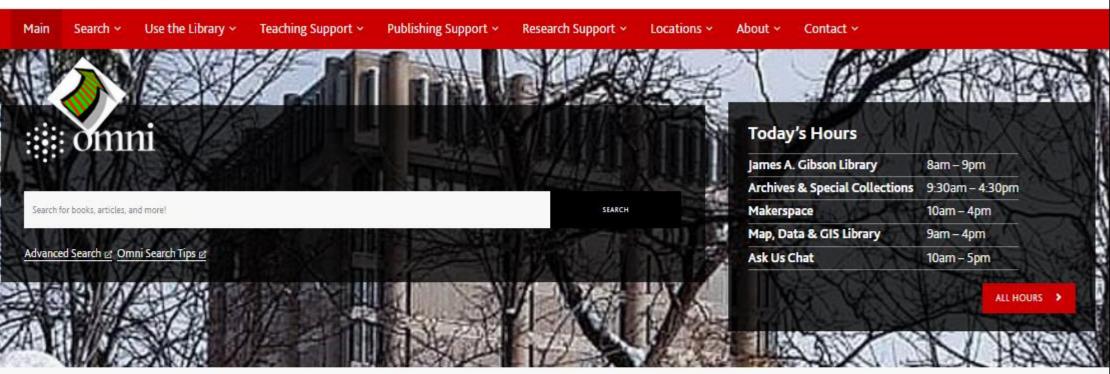


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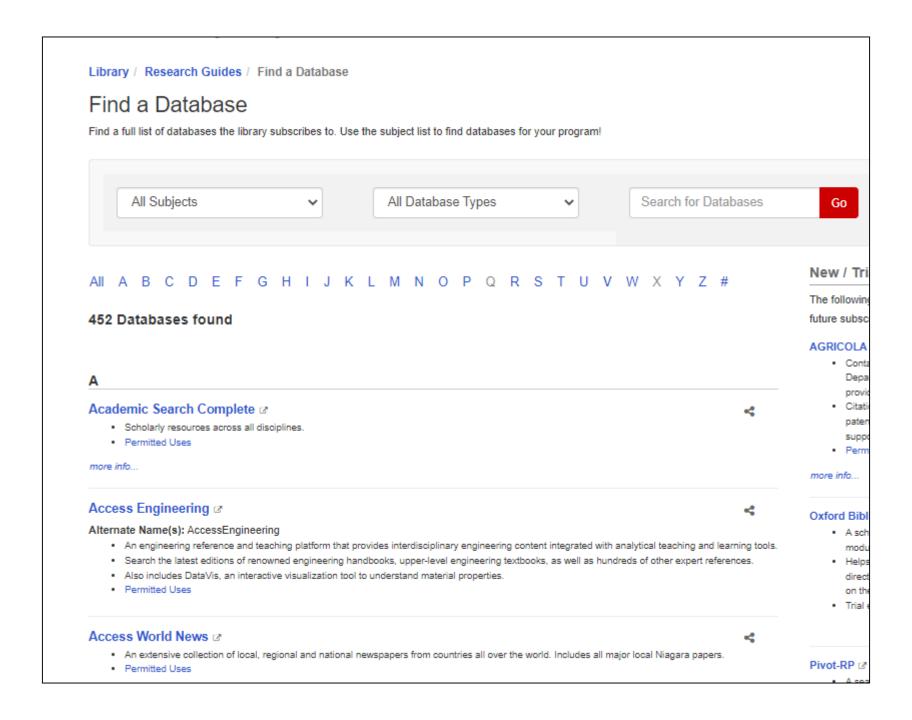
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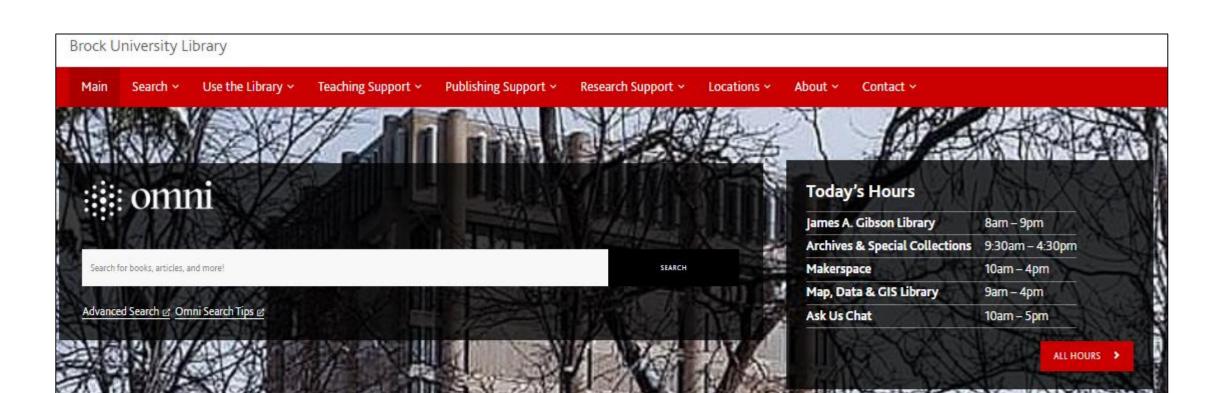


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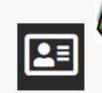
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What scholarly databases are your familiar with when searching for evidence information?

MEDLINE, Embase, PsycINFO, CINAHL, Web of Science Core Collection

MEDLINE, Embase, PsycINFO, CINAHL, Web of Science Core Collection

Omni, Google Scholar, Cochrane, AgeLine, ProQuest Sociology Collection, Education Source, <del>Scopus</del>, Semantic Scholar, BASE, Dimensions... other sources

MEDLINE, Embase, PsycINFO, CINAHL, Web of Science Core Collection

Omni, Google Scholar, Cochrane, AgeLine, ProQuest Sociology Collection, Education Source, Scopus, Semantic Scholar, BASE, Dimensions... other sources

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Omni, Google Scholar, Cochrane, AgeLine, ProQuest Sociology Collection, Education Source, Scopus, Semantic Scholar, BASE, Dimensions... other sources

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MEDLINE, Embase, PsycINFO, CINAHL, Web of Science Core Collection

Cochrane, ProQuest Sociology Collection, Education Source, other sources

- 1. Do adverse childhood experiences (ACEs) increase the risk of asthma? or obesity? or cardiovascular disease?
- 2. Is prenatal alcohol exposure associated with increased risk of ADHD in school-aged children?
- 3. Is ADHD associated with increased risk of obesity in children?
- 4. Is cannabis use associated with anxiety in adolescents?
- 5. Are later school start times associated with adolescent mental health?
- 6. Did cannabis legalization lead to an increase in youth cannabis use?
- 7. Impact of covid 19 on juvenile delinquency and youth crime in Niagara?
- 8. What is the impact of childhood poverty and family social condition on academic success?
- 9. How do children of single-parent families experience psychological adjustment issues?
- 10. Are there gender differences in the mental health of children through the COVID-19 period?

MEDLINE, Embase, PsycINFO, CINAHL, Web of Science Core Collection

Cochrane, ProQuest Sociology Collection, Education Source, other sources

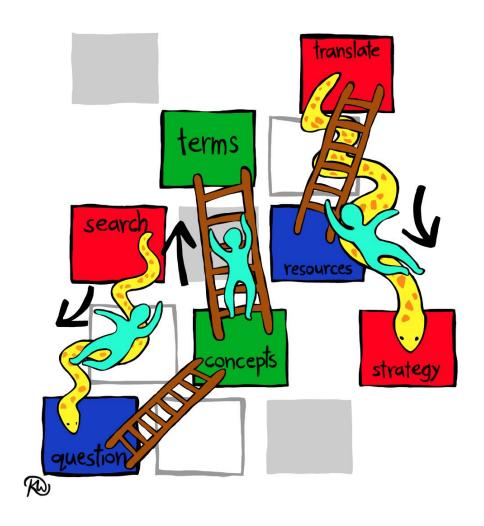
Is ADHD associated with increased risk of obesity in children?

MEDLINE, Embase, PsycINFO, CINAHL, Web of Science Core Collection

Cochrane, ProQuest Sociology Collection, Education Source, other sources

Is ADHD associated with increased risk of obesity in children?

MEDLINE via Web of Science ProQuest Sociology Collection Web of Science Core Collection Searching is a non-linear and potentially iterative process.



Evidence-based scholarly database search strategies

Evidence-based search question frameworks:

PICO: Population/problem, Intervention/exposure, Comparison, and Outcome

SPICE: Setting, Perspective, Interest, Comparison, Evaluation

Concepts: Main search concepts

Evidence-based search question frameworks:

PICO: Population/problem, Intervention/exposure, Comparison, and Outcome

P: (Who is the question focused on?)

I: (What behavior or variable is being studied?)

C: (How might I evaluate this issue with a broader context?)

O: (What in relation to this issue do I want to examine?)

## Evidence-based search question frameworks:

SPICE: Setting, Perspective, Interest/Intervention/Exposure, Comparison, Evaluation

S: (Setting is the context for the question)

P: (Perspective is the users, potential users, or stakeholders of the service...)

I: (Intervention is the action taken for the users, potential users, or stakeholders...)

C: (Comparison is the alternative actions or outcomes...)

E: (Evaluation is the result of measurement that will determine the success of the intervention...)

Evidence-based search question frameworks:

Main Search Concepts

What are the main search concepts/populations/issue of interest for your rapid review?

Evidence-based search question frameworks:

Main Search Concepts

What are the main search concepts/populations/issue of interest for your rapid review?

Evidence-based search question frameworks:

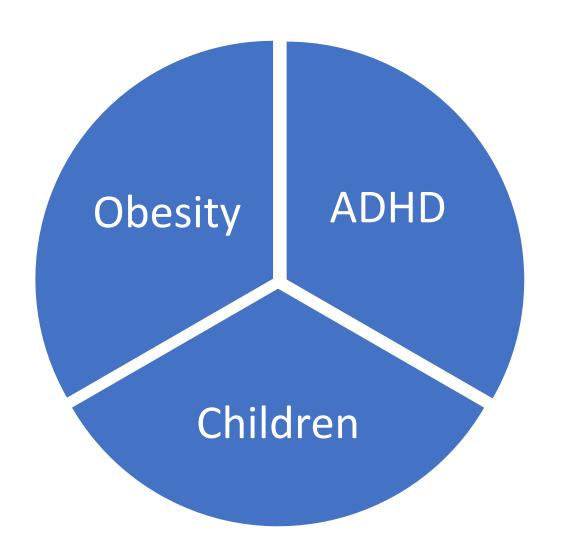
Main Search Concepts

What are the main search concepts/populations/issue of interest for your rapid review?

Obesity

**ADHD** 

Children



Currency of information Language Discipline

Format

# What is another word for obesity?



Need **synonyms for obesity**? Here's a list of **similar words** from our **thesaurus** that you can use instead.

#### Noun

The state of being extremely overweight





https://www.wordhippo.com/

## https://www.ncbi.nlm.nih.gov/mesh

NIH National Library of Medicine National Center for Biotechnology Information				
MeSH N	MeSH • obes	sity s Advanced		
	Limit	Auvanceu		
Full <b>→</b>				Send to: ▼
Obesity				
standards may vary with age,	sex, genetic or cultural b	recommended standards, usually ackground. In the BODY MASS li idly obese (MORBID OBESITY).		excess FATS in the body. The n 30.0 kg/m2 is considered obese,
PubMed search builder option <u>Subheadings:</u>	IS			
blood		enzymology	☐ pathology	
cerebrospinal fluid		epidemiology	☐ physiopatholo	ogy
chemically induced		ethnology	prevention ar	nd control
classification		etiology	psychology	
□ complications		genetics	☐ radiotherapy	
□ congenital		history	rehabilitation	
diagnosis		immunology	□ surgery	
diagnostic imaging		metabolism	☐ therapy	
diet therapy		microbiology	urine	
drug therapy		mortality	veterinary	
economics		nursing	□ virology	
embryology		parasitology		

- · Appetite Depressants
- Body Weight
- · Diet, Reducing
- Skinfold Thickness
- <u>Lipectomy</u>
- Anti-Obesity Agents
- Bariatrics

#### All MeSH Categories

Diseases Category

Nutritional and Metabolic Diseases

**Nutrition Disorders** 

Overnutrition

Overweight

#### Obesity

Obesity Hypoventilation Syndrome

Obesity, Abdominal

Obesity, Maternal

Obesity, Metabolically Benign

Obesity, Morbid Pediatric Obesity

Prader-Willi Syndrome

#### All MeSH Categories

<u>Diseases Category</u>

Pathological Conditions, Signs and Symptoms

Signs and Symptoms

Body Weight

Overweight

#### Obesity

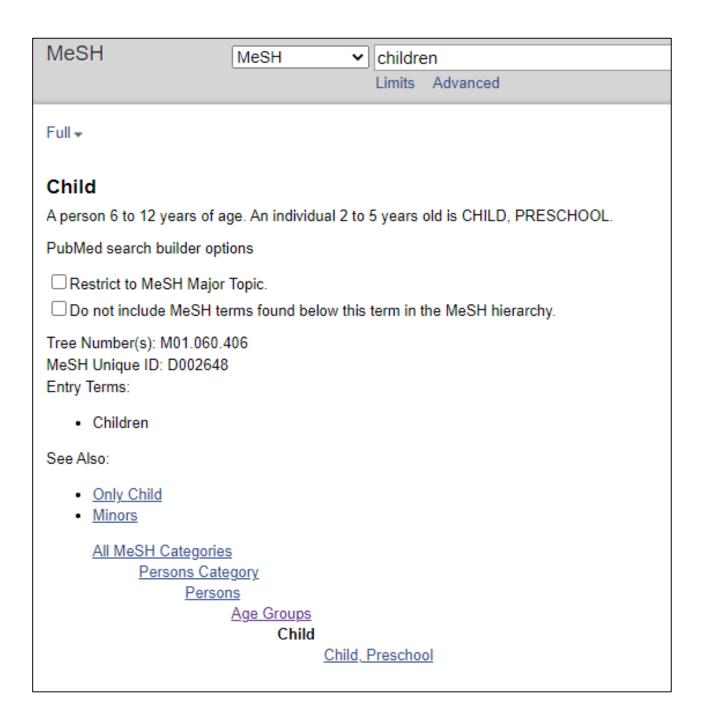
Obesity, Abdominal

Obesity, Maternal

Obesity, Metabolically Benign

Obesity, Morbid

Pediatric Obesity



#### Attention Deficit Disorder with Hyperactivity

A behavior disorder originating in childhood in which the essential features are signs of developmentally inappropriate inattention, impulsivity, and hyperactivity. Although most individuals have symptoms of both inattention and hyperactivity-impulsivity, one or the other pattern may be predominant. The disorder is more frequent in males than females. Onset is in childhood. Symptoms often attenuate during late adolescence although a minority experience the full complement of symptoms into mid-adulthood. (From DSM-V)

Year introduced: 1984

#### Entry Terms:

- · Attention Deficit Disorders with Hyperactivity
- ADHD
- · Attention Deficit Hyperactivity Disorder
- · Hyperkinetic Syndrome
- · Syndromes, Hyperkinetic
- · Attention Deficit-Hyperactivity Disorder
- · Attention Deficit-Hyperactivity Disorders
- · Deficit-Hyperactivity Disorder, Attention
- · Deficit-Hyperactivity Disorders, Attention
- · Disorder, Attention Deficit-Hyperactivity
- · Disorders, Attention Deficit-Hyperactivity
- ADDH
- · Attention Deficit Hyperactivity Disorders
- · Attention Deficit Disorder
- · Attention Deficit Disorders
- · Deficit Disorder, Attention
- · Deficit Disorders, Attention
- · Disorder, Attention Deficit
- · Disorders, Attention Deficit
- · Brain Dysfunction, Minimal
- · Dysfunction, Minimal Brain
- · Minimal Brain Dysfunction

#### Previous Indexing:

Brain Damage, Chronic (1966-1968)

All MeSH Categories

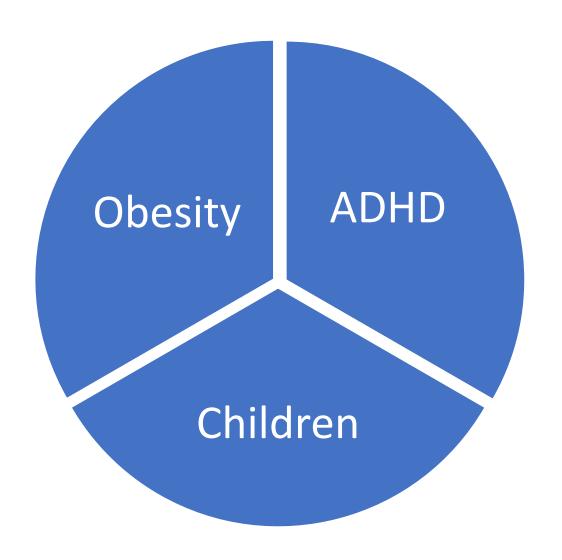
Psychiatry and Psychology Category

Mental Disorders

Neurodevelopmental Disorders

Attention Deficit and Disruptive Behavior Disorders

Attention Deficit Disorder with Hyperactivity



Currency of information Language Discipline

Format



Currency of information: 1984+

Language: English

Discipline: Health/Psychology

Format: Articles

MEDLINE

MeSH terms\*

## Database searching

Is ADHD associated with increased risk of obesity in children?

MEDLINE via Web of Science

**PsycINFO** 

Web of Science Core Collection

Obesity# or obese or "body weight"#

AND

ADHD or "attention deficit disorder"#

**AND** 

Children or child# or boy or girl or student\*

AND

Language=English; Date=2000+; Format=scholarly peer review articles; Humans

Currency of information: 2000+

Language: English

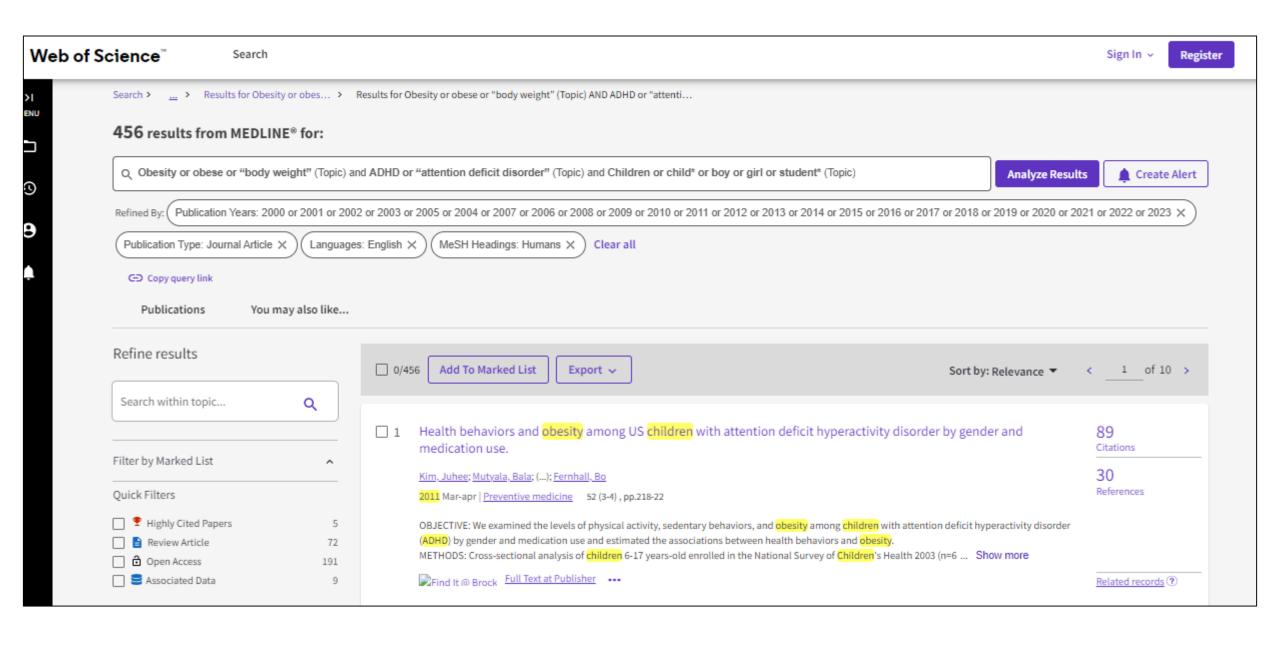
Discipline: Health/Psychology

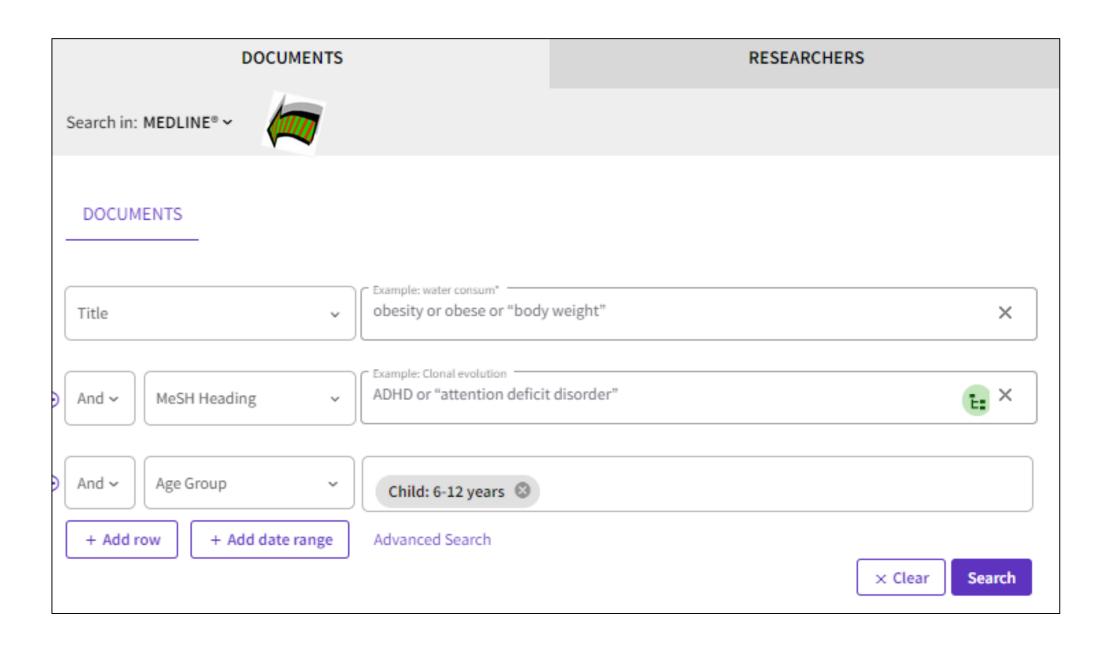
Format: Articles

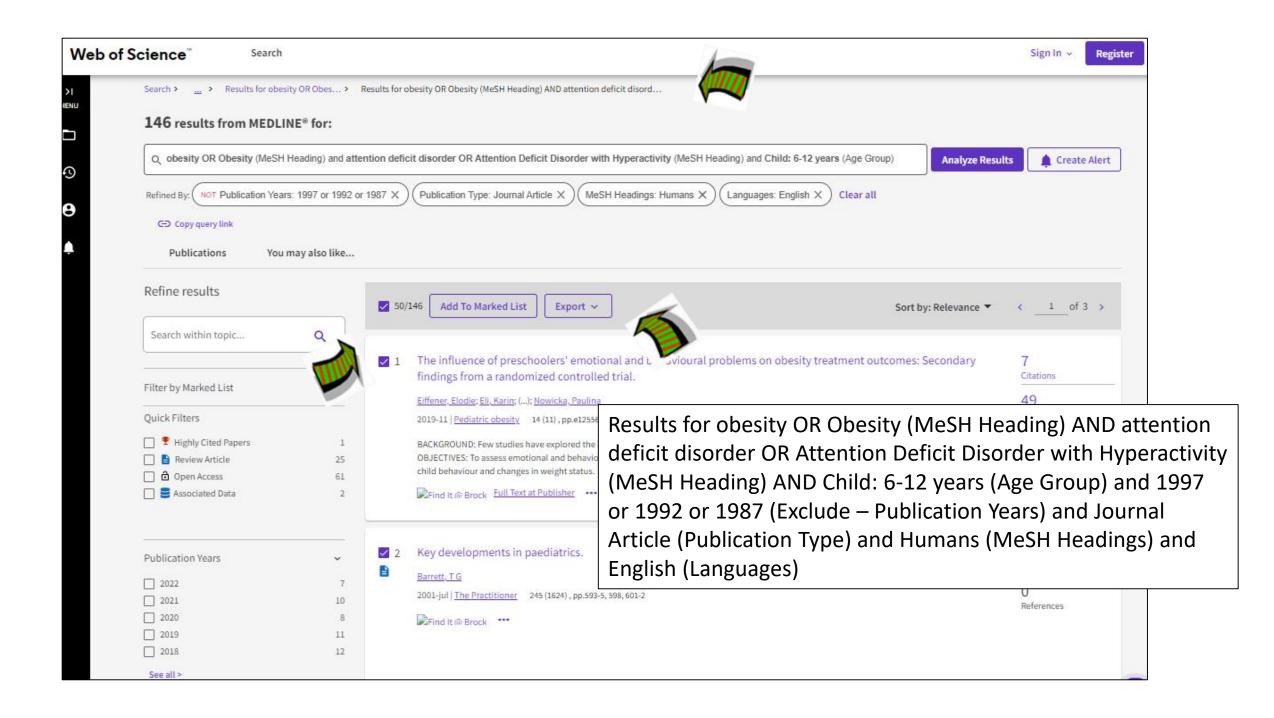
**MEDLINE** 

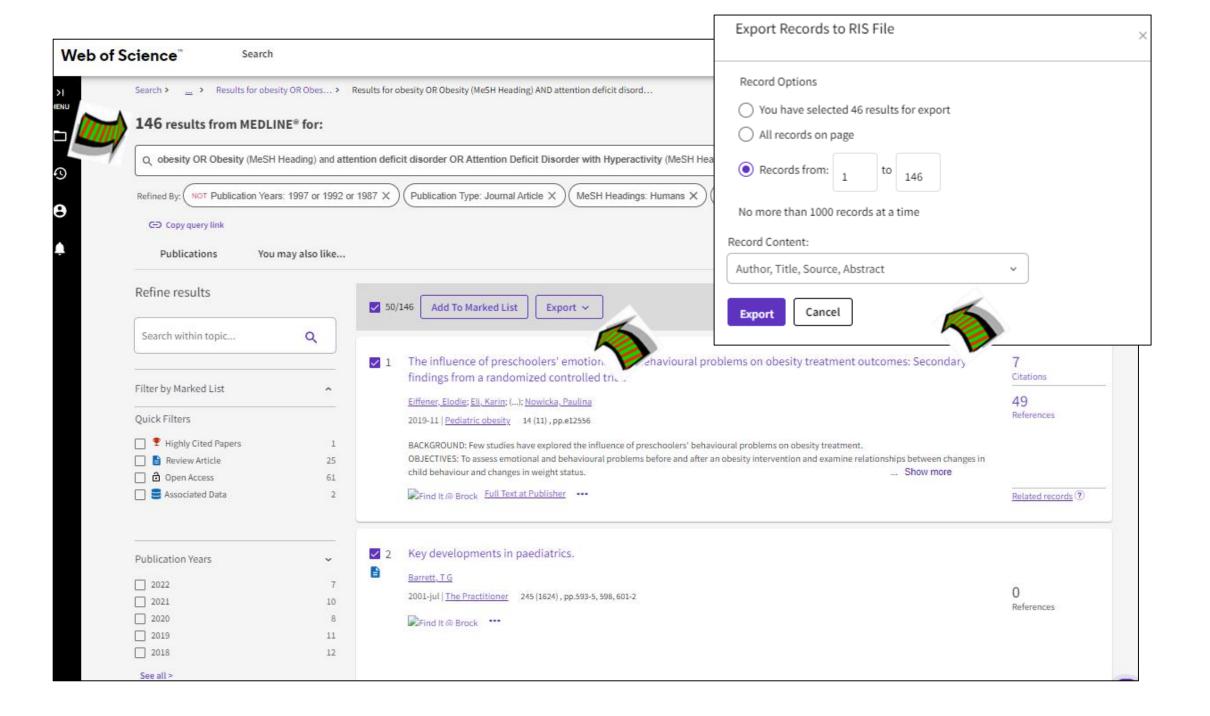
MeSH terms #

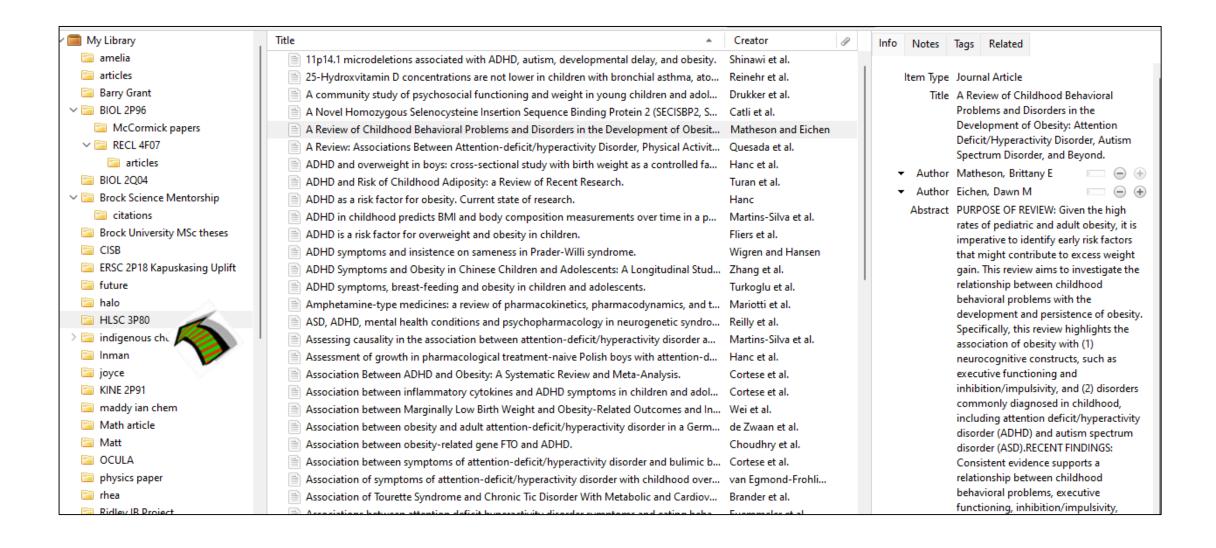
DOCUMENTS		RESEARCHERS
Search in: MEDLINE® ~		
DOCUMENTS		
	sity or obese or "body weight"	×
	aple: Neurodegeneration HD or "attention deficit disorder"	×
	ple: Neurodegeneration dren or child* or boy or girl or student*	×
+ Add row + Add date range Adva	anced Search	× Clear Search











Is ADHD associated with increased risk of obesity in children?

MEDLINE via Web of Science ProQuest Sociology Collection Web of Science Core Collection

Topics: obese\* or "body weight"

AND

Titles: ADHD or "attention deficit\*"

**AND** 

Topics: child\* or boy\* or girl\*

**AND** 

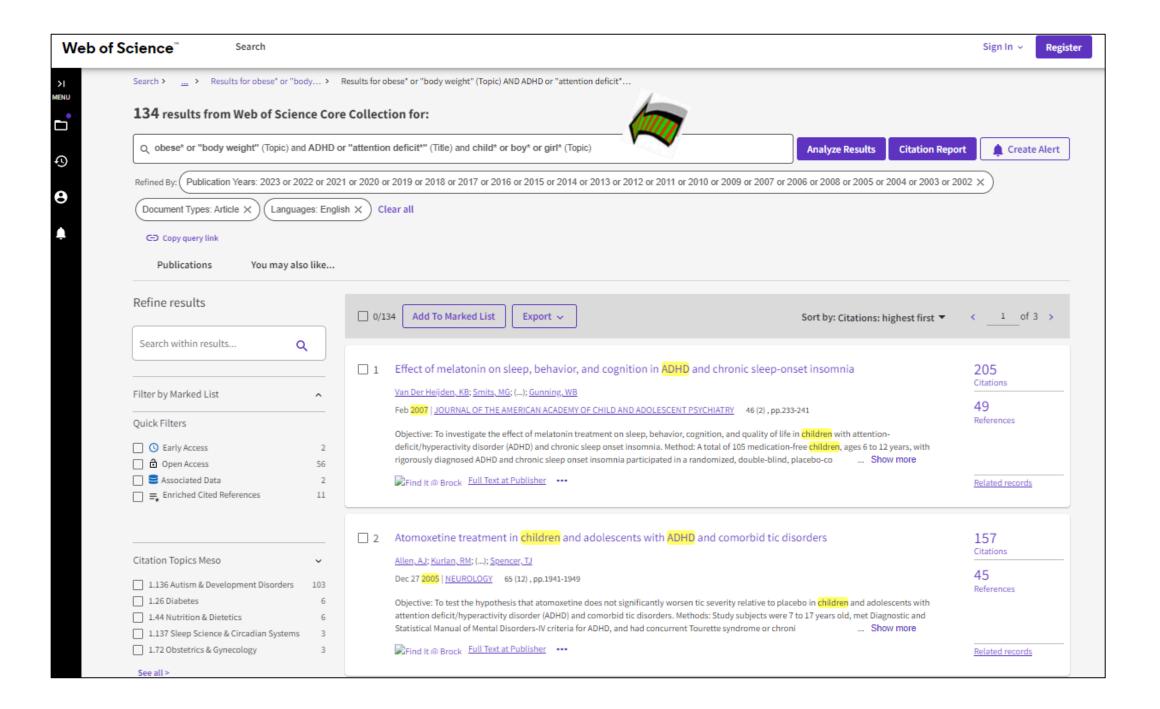
Language=English; Date=2000+; Format=scholarly peer review articles

Currency of information: 2000+

Language: English Format: Articles

Web of Science Core Collection

No thesuarus



Is ADHD associated with increased risk of obesity in children?

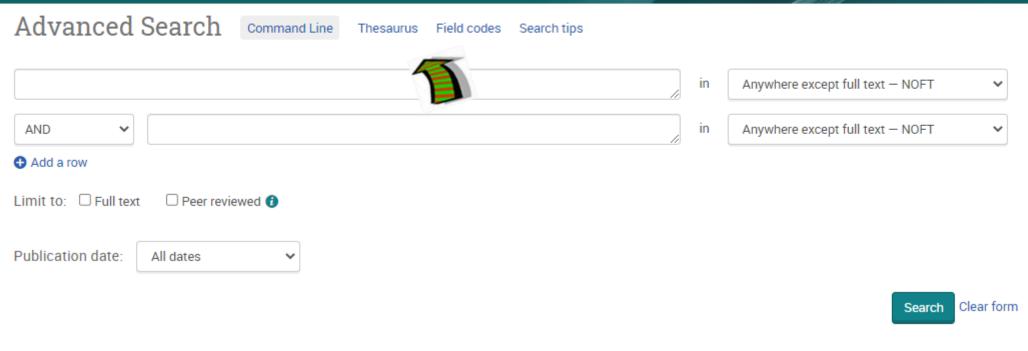
MEDLINE via Web of Science

**ProQuest Sociology Collection** 

Web of Science Core Collection



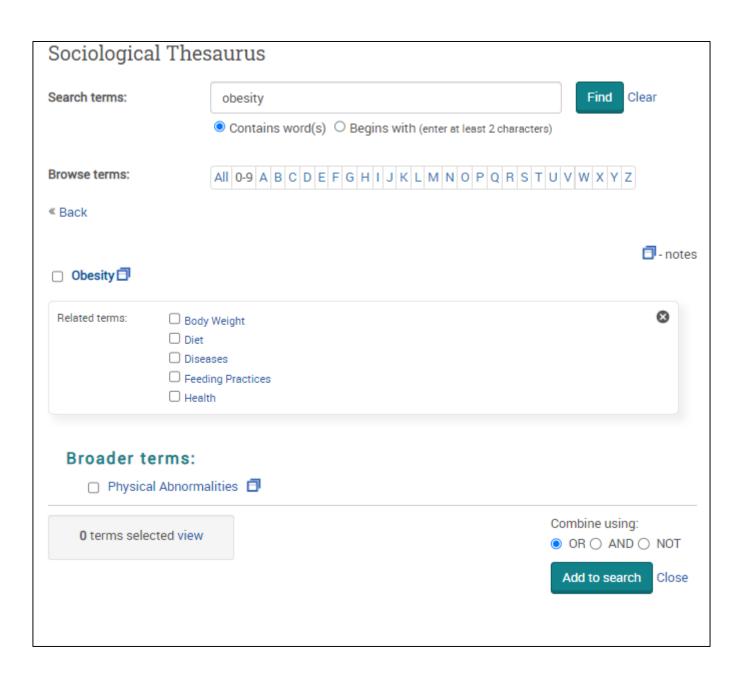


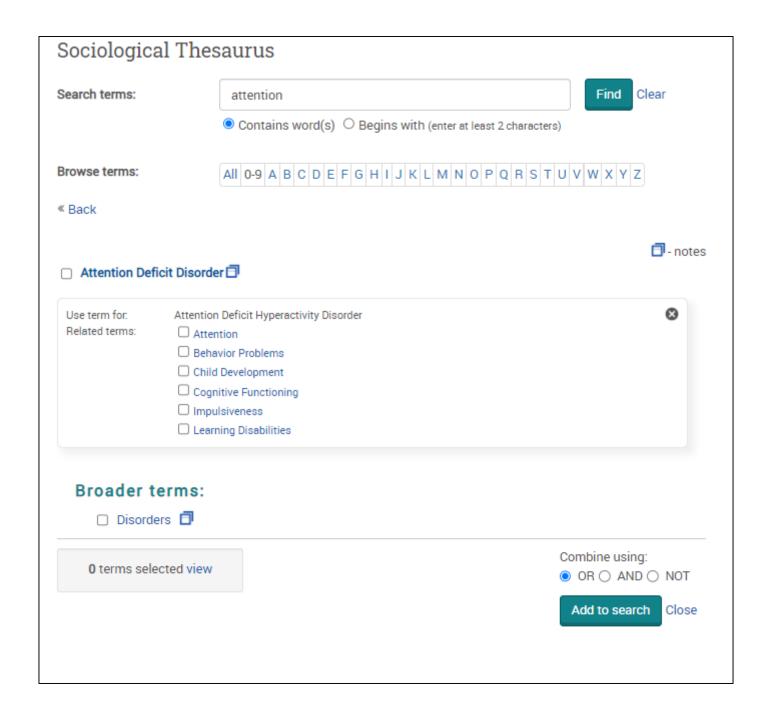


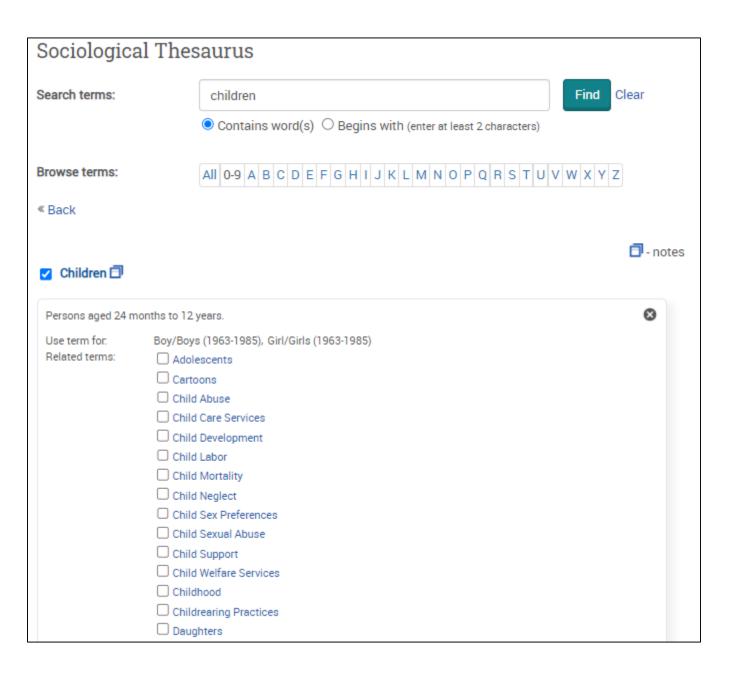
Source type:	
☐ Select all	
☐ Blogs, Podcasts, & Websites	<u>^</u>
Books	
Conference Papers & Proceedings	
Dissertations & Theses	
☐ Magazines ☐ Newspapers	
Other Sources	-
- Other Sources	

Document type:	
☐ Select all	
Advertisement Annual Report Article Audio/Video Clip Back Matter Bibliography	
Biography	•

Language:	
☐ Select all	
☐ Abkhazian ☐ Afar ☐ Afrikaans ☐ Arabic	
<ul><li>□ Basque</li><li>□ Belarusian</li><li>□ Bengali</li></ul>	*







```
Obesity#

AND

ADHD or "attention deficit disorder"#

AND

Children*# or "child development"# or childhood# or "elementary school students"#

AND

Language=English; Date=2000+; Format=scholarly articles
```

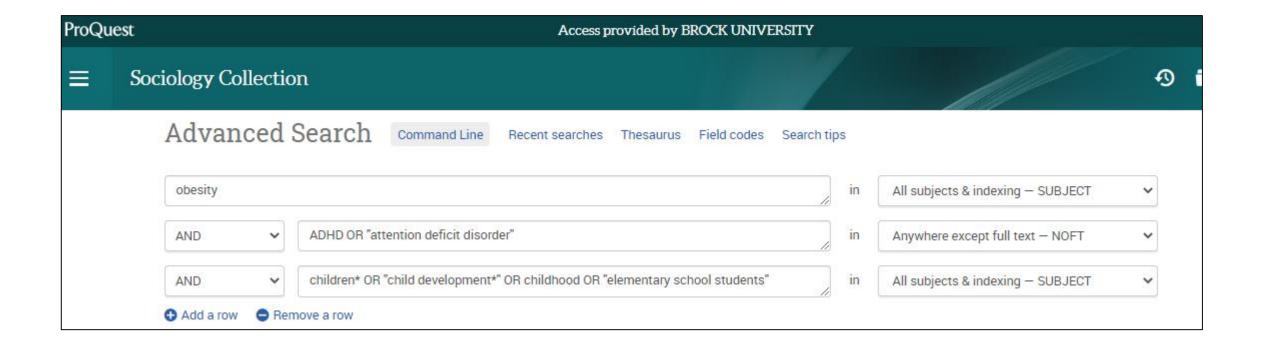
Currency of information: 2000+

Language: English

Format: Scholarly Articles

ProQuest Sociology Collection

Thesaurus Terms #

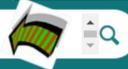


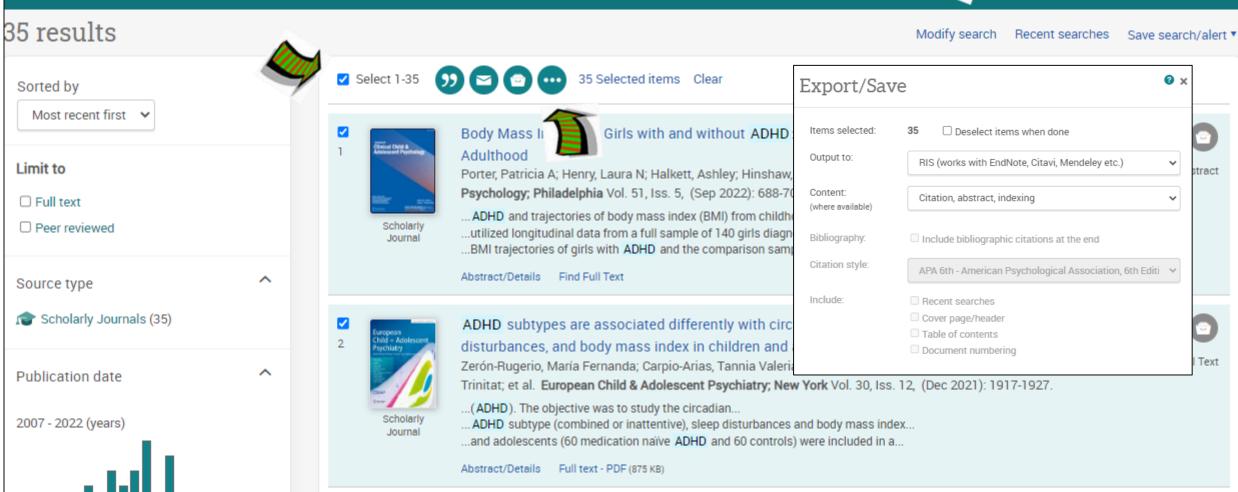






Subject(Obesity) Aird Hort(Adrid Orr attention dencit disorder) Aird subject(chilidlen. Orr chilid development\*" OR childhood OR "elementary school students")





	A Friantiacokinetic Study of Methylphenidate Hydrochionae Multilayer Extended-Neleas Adjer et al.
ialo halo	A psycho-genetic study of associations between the symptoms of binge eating disorder Davis et al.
HLSC 3P80	A Randomized Trial of Edivoxetine in Pediatric Patients with Attention-Deficit/Hyperactiv Lin et al.
indigenous chemistry	A Randomized, Double-Blind, Placebo-Controlled, Two-Way Crossover Clinical Trial of O Huang et al.
inman Inman	A Review of Childhood Behavioral Problems and Disorders in the Development of Obesit Matheson and Eichen
ioyce	A Review: Associations Between Attention-deficit/hyperactivity Disorder, Physical Activit Quesada et al.
	ADHD and overweight in boys: cross-sectional study with birth weight as a controlled fa Hanc et al.
ian chem	ADHD and Risk of Childhood Adiposity: a Review of Recent Research. Turan et al.
Math article	ADHD as a risk factor for obesity. Current state of research.
Matt	ADHD in childhood predicts BMI and body composition measurements over time in a p Martins-Silva et al.
CULA	ADHD is a risk factor for overweight and obesity in children.
physics paper	ADHD Rate in Obese Women With Binge Eating and Bulimic Behaviors From a Weight-L Nazar et al.
inhea rhea	> ADHD subtypes are associated differently with circadian rhythms of motor activity, sleep Zerón-Rugerio et al.
Ridley IB Project	ADHD symptoms and insistence on sameness in Prader-Willi syndrome. Wigren and Hansen
subject specialist librarians	ADHD symptoms and maturity - a study in primary school children Gustafsson et al.
Toughest Job in the Library	ADHD Symptoms and Obesity in Chinese Children and Adolescents: A Longitudinal Stud Zhang et al.
□ Vicki	ADHD symptoms, breast-feeding and obesity in children and adolescents.  Turkoglu et al.
My Publications	> Adult attention-deficit hyperactivity disorder and obesity: epidemiological study  Cortese Samuele et al.
Duplicate Items	Adulthood and childhood ADHD in patients consulting for obesity is associated with foo Brunault et al.
Unfiled Items	Age-dependent neuropsychological deficits and effects of methylphenidate in children Hanisch et al.
€ Trash	Amphetamine-type medicines: a review of pharmacokinetics, pharmacodynamics, and t Mariotti et al.
	An open clinical trial of buspirone in children with attention-deficit hyperactivity disorder Malhotra and Santosh

MEDLINE, Embase, PsycINFO, CINAHL, Web of Science Core Collection

Omni, Google Scholar, Cochrane, AgeLine, ProQuest Sociology Collection, Education Source, Scopus, Semantic Scholar, BASE, Dimensions... other sources

**MEDLINE** via OVID

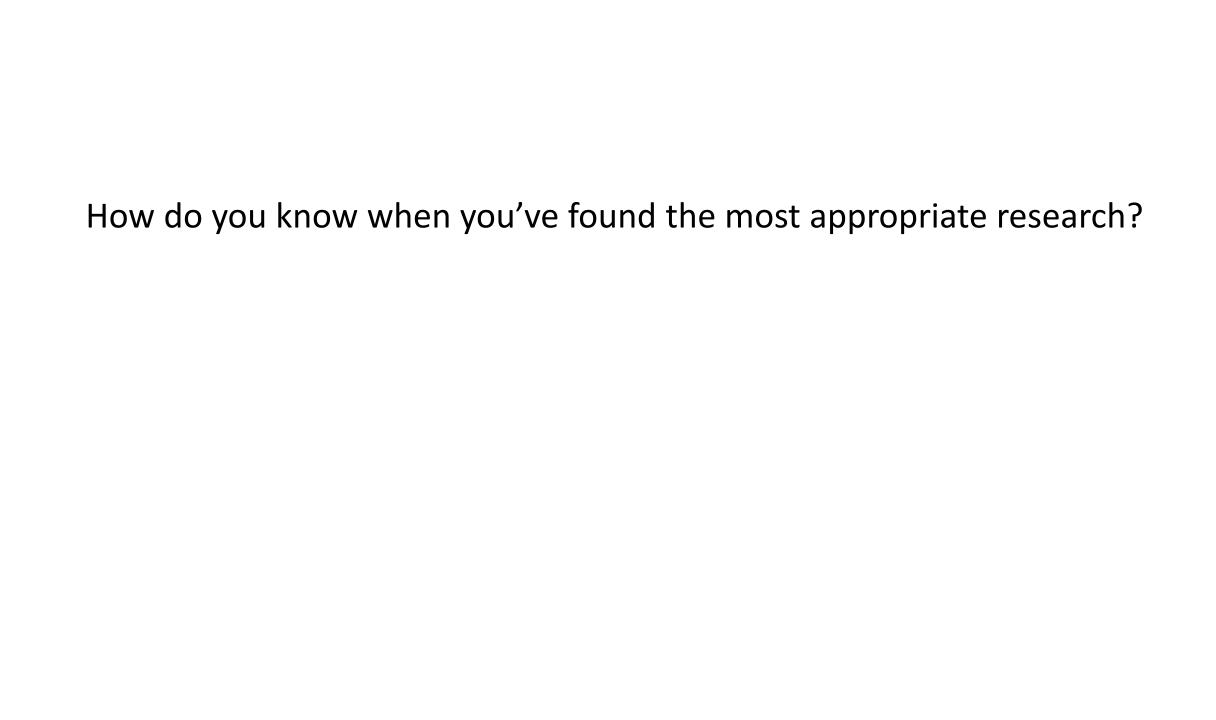
MEDLINE via PubMed

MEDLINE via SciFinder-n

MEDLINE via Web of Science Complete

Is ADHD associated with increased risk of obesity in children?

MEDLINE via Web of Science	146
ProQuest Sociology Collection	35
Web of Science Core Collection	<u>134</u>
	315
remove duplicates	<u>85</u>
citations	230





Is ADHD associated with increased risk of obesity in children?

#### Inclusion

Scholarly articles

2000+

English

Children 6-12 years of age / grades

Humans

Obesity BMI class 1 or 2

Geography/Setting

#### **Exclusion**

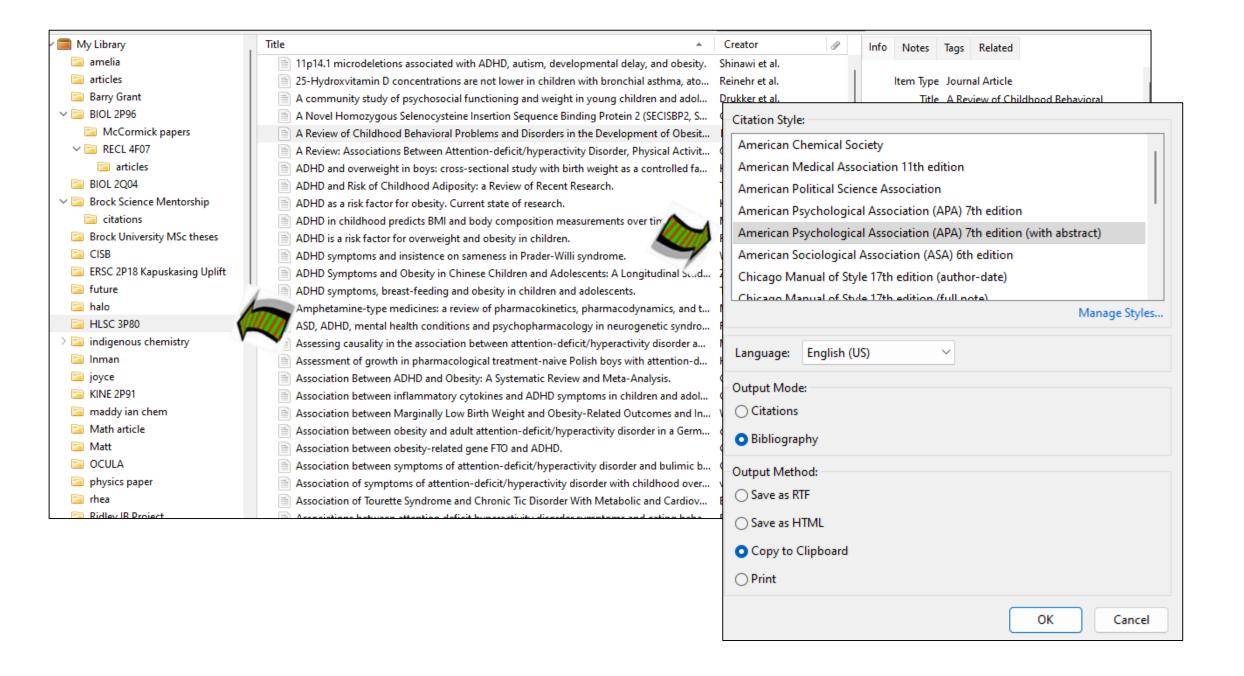
study design / random trials

primarily social / health indicators

avoid neurodevelopmental disorders

avoid genetic disorders

types of data



#### Inclusion

Scholarly articles
2000+
English
Children 6-12 years of age / grades
Humans
Obesity BMI class 1 or 2
Geography/Setting

Association between symptoms of attention-deficit/hyperactivity disorder and bulimic behaviors in a clinical sample of severely obese adolescents.

Preliminary evidence suggests a comorbidity between attention-deficit/hyperactivity disorder (ADHD) and obesity. This study was carried out to identify the clinical characteristics of obese adolescents with a higher probability of ADHD and advance the understanding of the potential factors underlying the comorbidity between obesity and ADHD. We evaluated the association between ADHD symptoms and bulimic behaviors, depressive and anxiety symptoms, degree of obesity, pubertal stage, age and gender in a clinical sample of obese adolescents. DESIGN: Cross-sectional study. SUBJECTS: Ninety-nine severely obese adolescents aged 12-17 years. MEASUREMENTS: Subjects filled out the Bulimic Investigatory Test, Edinburgh, the Beck Depression Inventory and the State-Trait Anxiety Inventory for Children. Their parents completed the Conners Parent Rating Scale, which assesses ADHD symptoms. The degree of overweight was expressed as body mass index-z score. Puberty development was clinically assessed on the basis of Tanner stages. RESULTS: Bulimic behaviors were significantly associated with ADHD symptoms after controlling for depressive and anxiety symptoms. The degree of overweight, pubertal stage, age and gender were not significantly associated with ADHD symptoms. CONCLUSION: Obese adolescents with bulimic behaviors may have a higher probability to present with ADHD symptoms independently from associated depressive or anxiety symptoms. The degree of overweight, pubertal stage, age and gender might not be useful for detecting obese adolescents with ADHD symptoms. Therefore, we suggest systematic screening for ADHD in obese adolescents with bulimic behaviors. Further studies are needed to understand which specific dimension of ADHD primarily accounts for the association with bulimic behaviors. Future research should also investigate the causal link between bulimic behaviors and ADHD and explore potential common neurobiological alterations. This may lead to a better understanding of the effectiveness of stimulants for the treatment of bulimic behaviors in obese subjects.

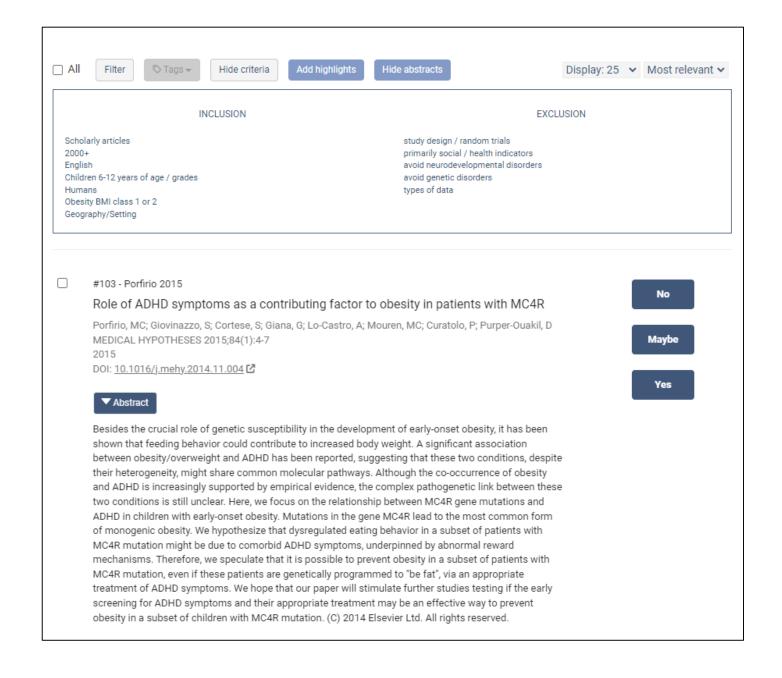
### **Exclusion**

study design / random trials
primarily social / health indicators
Aviod neurodevelopmental disorders
Avoid genetic disorders
Types of data

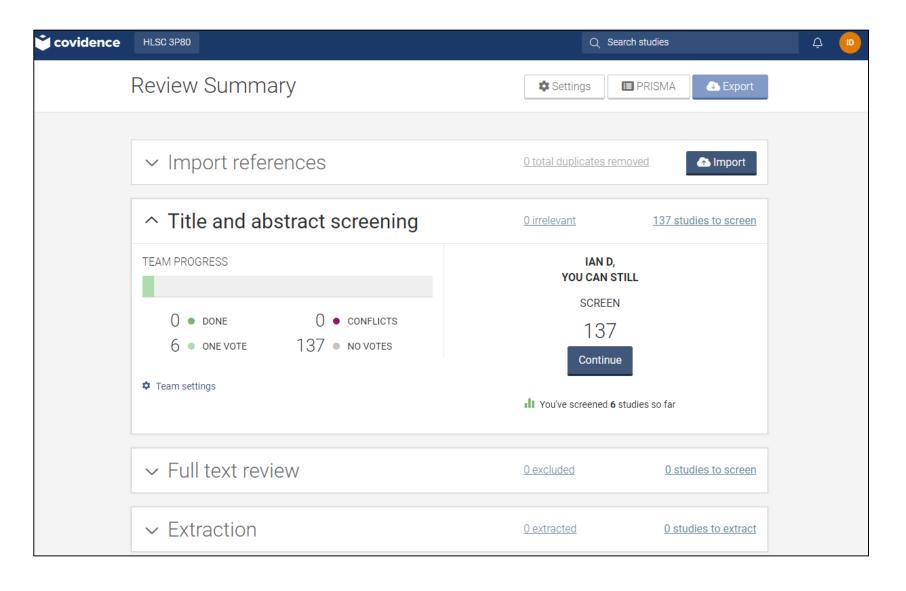
Association between symptoms of attention-deficit/hyperactivity disorder and bulimic behaviors in a clinical sample of severely obese adolescents.

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### Covidence database



## Covidence database

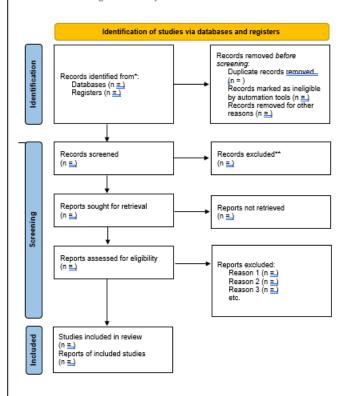


## Is ADHD associated with increased risk of obesity in children?

MEDLINE via Web of Science	146
ProQuest Sociology Collection	35
Web of Science Core Collection	<u>134</u>
	315
remove duplicates	<u>85</u>
citations	230
screening	final 21

### PRISMA 2020 Word flow chart generator

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases and registers only



\*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).

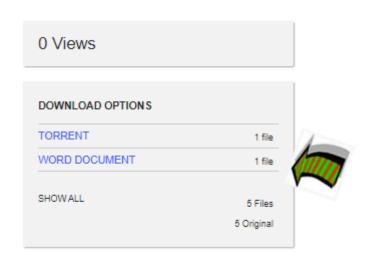
\*\*If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

From: Page MJ, McKenzie JE, Bossuxt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmi.n71

For more information, visit: http://www.prisma-statement.org/

https://archive.org/details/prisma-word-flow-chart-2020-generator

Click on "WORD DOCUMENT" to download a Word copy for editing



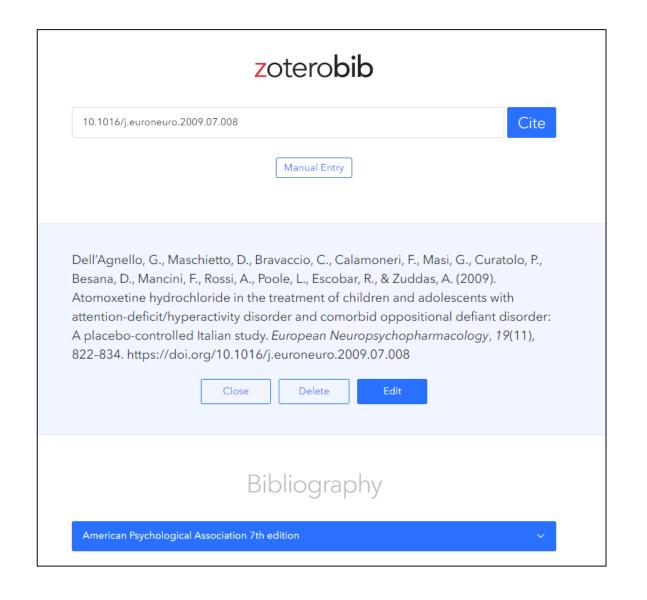
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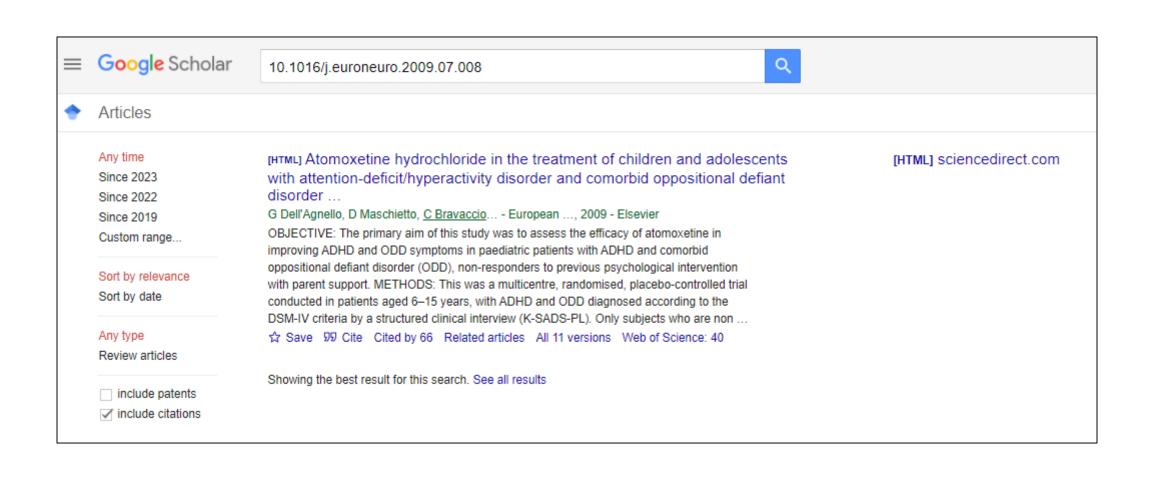


Granato, M. F., Ferraro, A. A., Lellis, D. M., & Casella, E. B. (2018). Associations between Attention-Deficit Hyperactivity Disorder (ADHD) Treatment and Patient Nutritional Status and Height. Behavioural Neurology, 2018, 7341529–7341529. https://doi.org/10.1155/2018/7341529

Guner, S., Uneri, O., Sekmen, E., Goker, Z., Cop, E., & Hekim, O. (2021). Assessment of Obesity, Psychiatric Comorbidity and Food Addiction in Children and Adolescents with Attention Deficit and Hyperactivity Disorder. PSYCHIATRY AND BEHAVIORAL SCIENCES, 11(2), 104–114. https://doi.org/10.5455/PBS.20200612044606

Yim, G., Roberts, A., Ascherio, A., Wypij, D., Kioumourtzoglou, M., & Weisskopf, M. (2021). Association Between Periconceptional Weight of Maternal Grandmothers and Attention-Deficit/Hyperactivity Disorder in Grandchildren. JAMA NETWORK OPEN, 4(7). https://doi.org/10.1001/jamanetworkopen.2021.18824





European Neuropsychopharmacology (2009) 19, 822-834





www.elsevier.com/locate/euroneuro

Atomoxetine hydrochloride in the treatment of children and adolescents with attention-deficit/hyperactivity disorder and comorbid oppositional defiant disorder: A placebo-controlled Italian study

Grazia Dell'Agnello <sup>a</sup>, Dino Maschietto <sup>b</sup>, Carmela Bravaccio <sup>c</sup>, Filippo Calamoneri <sup>d</sup>, Gabriele Masi <sup>e</sup>, Paolo Curatolo <sup>f</sup>, Dante Besana <sup>g</sup>, Francesca Mancini <sup>a</sup>, Andrea Rossi <sup>a</sup>, Lynne Poole <sup>h</sup>, Rodrigo Escobar <sup>i</sup>, Alessandro Zuddas <sup>j,\*</sup> for the LYCY Study Group

- a Medical Department, Eli Lilly Italia, Italy
- <sup>b</sup> Operative Unit of Child Neuropsychiatry, Azienda USL n 10 Veneto Orientale, San Donà di Piave, Venezia, Italy
- <sup>c</sup> Department of Pediatrics, University of Naples "Federico II", Italy
- <sup>d</sup> Clinic of Child Neuropsychiatry, University Policlinic of Messina, Italy
- Department of Child Neuropsychiatry, IRCCS Fondazione Stella Maris, Calambrone, Pisa, Italy
- Department of Child Neuropsychiatry, Tor Vergata University of Rome, Italy
- 8 Operative Structure of Child Neuropsychiatry, Hospital of Alessandria, Italy
- h Eli Lilly and Co. UK
- European Medical Department, Eli Lilly and Co. Alcobendas, Madrid, Spain

Abstract

Department of Neuroscience, Section of Child Neuropsychiatry, University of Cagliari, Italy

Received 3 January 2009; received in revised form 2 July 2009; accepted 23 July 2009

#### KEYWORDS

Atomoxetine; Attention-deficit/ hyperactivity disorder; Oppositional defiant disorder

Objective: The primary aim of this study was to assess the efficacy of atomoxetine in improving ADHD and ODD symptoms in paediatric patients with ADHD and comorbid oppositional defiant disorder (ODD), non-responders to previous psychological intervention with parent support. Methods: This was a multicentre, randomised, placebo-controlled trial conducted in patients aged 6–15 years, with ADHD and ODD diagnosed according to the DSM-IV criteria by a structured

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<sup>\*</sup> Corresponding author. Centre for Pharmacological Therapies in Child and Adolescent Neuropsychiatry, Department of Neuroscience, University of Cagliari, via Ospedale, 46, 09124 Cagliari, Italy. Tel.: +39 070 609 3509/3510; fax: +39 070 669591.
E-mail address: azudas@unica.it (A. Zuddas).



## PRISMA 2009 Checklist

Section/topic	#	Checklist item	pg#					
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators. (this component would typically have 2 or more individuals independently searching and sometime includes contacting investigators – yours will not, so it's fairly simple)						
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made. (i.e., what results, variables, and/or study characteristics are you pulling from the articles to report? [eg in your table])						
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis. (i.e. how will you assess the risk of bias in the studies? consider biases related to study design, sample/recruitment procedures, generalizability of sample, group assignment [randomization, blinding], measurement biases, confounding, funding, length of follow-up, etc.]						
Summary measures	<del>13</del>	State the principal summary measures (e.g., risk ratio, difference in means).						
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I²) for each meta analysis.						
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies, language bias, etc.).						
Additional analyses  16 Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.								
Results are now what you	four	low diagram and results summary table (NOTE: report results in the table and diagram AND describe them in the written paper).  In the diagram and results summary table (NOTE: report results in the table and diagram AND describe them in the written paper).  In the diagram and results summary table (NOTE: report results in the table and diagram AND describe them in the written paper).  In the diagram and results summary table (NOTE: report results in the table and diagram AND describe them in the written paper).  In the diagram and results summary table (NOTE: report results in the table and diagram AND describe them in the written paper).						
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a <b>flow diagram</b> . (Results of your search – how many results, how many screened, how many excluded and way, etc. You must include a flow diagram, and outline this in your written discussion).						
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations. (ie what do the studies look like that you included in the review? Include Table AND describe in writing)						
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12). (assess each study for risk of bias – see item 12 methods for examples to consider; describe strengths/limitations of <b>individual</b> studies and commonalities in these individual study risk of biases across them)						
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot. (ie what did the studies find in answer to your research question?)						
Synthesis of results	21	Present results of each meta analysis done, including confidence intervals and measures of consistency.						

Citation	Study characteristic 1	Study characteristic 2	Study characteristic 3	Risk of Bias	
Dell'Agnello, G., Maschietto, D., Bravaccio, C., Calamoneri, F., Masi, G., Curatolo, P., Besana, D., Mancini, F., Rossi, A., Poole, L., Escobar, R., Zuddas, A., & LYCY Study Grp. (2009). Atomoxetine hydrochloride in the treatment of children and adolescents with attention-deficit/hyperactivity disorder and comorbid oppositional defiant disorder: A placebo-controlled Italian study. EUROPEAN NEUROPSYCHOPHARMACOLOGY, 19(11), 822–834					
Granato, M. F., Ferraro, A. A., Lellis, D. M., & Casella, E. B. (2018). Associations between Attention-Deficit Hyperactivity Disorder (ADHD) Treatment and Patient Nutritional Status and Height. Behavioural Neurology, 2018, 7341529–7341529.					
Guner, S., Uneri, O., Sekmen, E., Goker, Z., Cop, E., & Hekim, O. (2021). Assessment of Obesity, Psychiatric Comorbidity and Food Addiction in Children and Adolescents with Attention Deficit and Hyperactivity Disorder. PSYCHIATRY AND BEHAVIORAL SCIENCES, 11(2), 104–114					
Yim, G., Roberts, A., Ascheria, A., Wxpii, D., Kigumgurtzoglou, M., & Weisskopf, M. (2021). Association Between Periconceptional Weight of Maternal Grandmothers and					

What bias was introduced to your rapid review?



## PRISMA 2009 Checklist

Risk of bias across	22	Present results of any assessment of risk of bias across studies (see Item 15 for examples; why might the results of your group						
studies		of articles be biased? Are certainly results more likely to be included?)						
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).						
DISCUSSION /15 (e.g., a	inswe	r to your research question; overall main conclusions and limitations or gaps identified in research reviewed; next steps/future						
research; limitations of y	our ra	apid review)						
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers). (overall – what did your rapid review find? What doe these studies say in answer to your research question? And what is the strength of this evidence available? What is the relevance – ie what do these results mean to those who could use this evidence?)						
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias). (i.e., limitations overall of the studies that you reviewed, AND potential limitations of your rapid review – think about if/how our rapid review might have missed key evidence and why? Think about what makes a rapid review 'rapid' relative to a Systematic Review?)						
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research. (sum up what the evidence says and means; what are implications for future research based on limitations identified in the research)						
FUNDING								
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.						

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(6): e1000097. doi:10.1371/journal.pmed1000097

For more information, visit: www.prisma-statement.org.

Trujillo-santos 2005	Schellong 1999	Romera 2008	Romera 2006	Rahman 2009	Manganaro 2008	Liu 2013	Junger 2006	Isma 2007	Huang 2010	Feng 2011	Blattler 2003	Aschwanden 2001	
	~	~	~	~		<b>⊸</b>	•	•	•		•	->	Random sequence generation (selection bias)
	2	•	?	~		~	•	•	~		•	•	Allocation concealment (selection bias)
	•							•	•		•	~	Blinding of participants and personnel (performance bias)
	•	~	?			~	•	•	<b>⊸</b>		•	•	Blinding of outcome assessment (detection bias)
	•	•	•	•		•	•	•	•		•	•	Incomplete outcome data (attrition bias)
	•	•	•	•		•	•	•	•		•	•	Selective reporting (reporting bias)
													Other bias
'													

Handbook of
Evidence-Based Therapies for
Children and Adolescents
Bridging Science and Practice

Edited by
Ric G. Steele, T. David Elkin, and
Michael C. Roberts



### Evidence-Based Therapies for Children and Adolescents with Eating Disorders

DAVID H. GLEAVES and JANET D. LATNER

"Is evidence-based treatment of anorexia nervosa possible?', the answer must be 'Barely'."

(Fairburn, 2005, p. S29)

The principal eating disorders in the current Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2000) are anorexia nervosa (AN), bulimia nervosa (BN), and eating disorder not otherwise specified (EDNOS), which may designate binge eating disorder (BED) or atypical variants of AN or BN. As with adults, the atypical variants of eating disorders appear to be more common than the specified disorders (Kjelsås et al., 2004). In earlier versions of the DSM (up to the 3rd edition, revised), the eating disorders were listed within the Disorders usually first evident in infancy, childhood, or adolescence section. Given their prominence among adults, they were moved to their own section in the most recent edition. However, their common origin in childhood should not be forgotten and is the focus of this chapter.

Obesity is also a common eating-related problem among children and adolescents, and there are also several eating-/feeding-related problems that are usually first diagnosed in infancy or early childhood and are thus included in that section of the DSM-IV. These are pica, rumination disorder, and feeding disorder of infancy or early childhood (sometimes referred to as failure to thrive). In this chapter, we will focus on AN and BN and somewhat on BED. Pediatric obesity is covered by Johnston and Tyler (Chapter 20). Given that we will focus largely on treatment rather than

DAVID H. GLEAVES • University of Canterbury and JANET D. LATNER • University of Hawaii



NEW EDITION

# TOXIC CHILDHOOD

HOW THE MODERN WORLD IS
DAMAGING OUR CHILDREN AND
WHAT WE CAN DO ABOUT IT



SUE PALMER

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# A BEHAVIOURAL GENETIC MODEL OF THE MECHANISMS UNDERLYING THE LINK BETWEEN OBESITY AND DIMENSIONAL MEASURES OF ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD)

#### KAREN A. PATTE

A DISSERTATION SUBMITTED TO

THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

GRADUATE PROGRAM IN KINESIOLOGY AND HEALTH SCIENCE,
YORK UNIVERSITY,
TORONTO, ON

August 2015

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#### FLORIDA INTERNATIONAL UNIVERSITY

#### Miami, Florida

A MODEL FOR THE ASSOCIATION BETWEEN ATTENTION-DEFICIT/
HYPERACTIVITY DISORDER AND OBESITY: EFFECTS OF PHYSICAL
ACTIVITY, SEDENTARY BEHAVIOR, GENDER, AND MEDICATION

A dissertation submitted in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY

in

PUBLIC HEALTH

by

Danielle Quesada

2018

#### Introduction

Over the past three decades, attention-deficit/hyperactivity disorder (ADHD) and obesity have both become conditions of great concern for public health. Affecting the lives of children, adolescents and adults. ADHD affects an estimated 6.4 million children and adolescents in the United States (Visser et al., 2014); with an estimated economic burden ranging from \$143-\$266 billion dollars per year. Similarly, obesity affects approximately 12.7 million children and adolescents in the U.S. with an estimated economic burden ranging from \$147-\$330 billion dollars per year (Ogden et al., 2015).

ADHD and obesity are both growing epidemics, negatively affecting the health and well being of children and adolescents. ADHD is defined as having impairing, excessive levels of hyperactivity, impulsivity and inattention (American Psychiatric Association, 2013). These symptoms can affect a child's behavior, self- esteem and social development (American Psychiatric Association, 2013). Consequently, having deleterious effects on the quality of life of a child. A theoretical framework for ADHD posits that those with ADHD are afflicted by deficits in the catecholaminergic system which affects a person's executive functions. Executive functions in turn regulate impulsivity, inhibitory control and the ability to focus (Diamond, 2013)

Obesity is defined as having a body mass index (BMI) at or above the 95th percentile for children and adolescents of the same age and sex (Barlow, 2007). Obesity is associated with the development of chronic diseases, such as type-2 diabetes and certain types of cancer (Gallagher et al. 2015; Fagot-Campagna et al., 2000). In addition, children and adolescents who are overweight or obese are more likely to suffer from



#### Russell A. Barkley & Associates

Number 5 ISSN 1065-8025 August 2014

### ADHD, Obesity, and Eating Pathology

#### Russell A. Barkley, Ph.D.

obesity, and eating pathologies has earlier study from 18 years ago examincreased substantially in the past de- ined a sample of 124 ADHD children the relationship of ADHD and problems with growth, particularly with weight and associated eating issues? This article will review this literature. What is rather fascinating here. particularly in regard to obesity and lant medications, drugs thought to eating pathologies, is that the past 40 result in reductions in weight. There years have been witness to the development of a trait-by-environmental resource interaction (impulsivity x junk food availability) that has resulted in a marked increase in these eating problems in association with ADHD in the any growth delay may be time limcurrent generation of children-not ited to childhood. These height defi- Konofal, 2011). The authors speculated evident in prior generations. I will discuss this iteration below.\*

#### OBESITY AND CHILD ADHD

For years, ADHD was not thought to be associated with problems of height, weight, or physical growth apart from concerns that stimulant treatment of the disorder could be associated with growth delay. Indeed, if there were an association of the disorder with weight, it was clinically conjectured to be a negative one due to the increased activity levels of children with ADHD that one would expect would result in greater calorie expenditure and hence

growth deficits in height and weight (Spencer et al., 1996). No evidence was found of weight deficits in the children with ADHD, even though 89% of the sample had been treated with stimuwere small but significant deficits in height in the children with ADHD compared to the control group but not between the adolescents with ADHD and their control group, implying that stimulant medications. The authors growth regulation in children with the

The scientific literature on ADHD, a lower body mass index (BMI). One concluded that ADHD itself might be associated with temporary deficits in growth in height in childhood through cade. What is currently known about and adolescents for the presence of mid-adolescence, apart from any linkage to stimulant medication treatment which may no longer be evident by late

In contrast, three more recent studies suggest excess BMI or frank obesity in current children with ADHD For instance, in a large study of more than 7,000 children in France, medication-naïve children with ADHD were somewhat taller and heavier than typical children while no such differences were evident in adolescents with ADHD (Faraone, Lecentreux, & cits were not related to treatment with that this might reflect a problem with

\*This article, updated with recent studies, is adapted in part from a chapter on health and related impairment that will appear in the fourth edition of my upcoming textbook on ADHD (Barkley, in press).

#### Contents

ADHD, Obesity, and Eating Pathology, 1 • Stimulant Side Effects and the D1/D2 Receptor Gene Activity, 6 • Research

NOTICE TO NON-PROFESSIONALS The information contained in this newsletter is not intended as a substitute for consultation with health care professionals

© 2014 The Guilford Press The ADHD Report • 1

## When Children EAT What They SEE

Dr. David Ludwig talks about the negative influence TV commercials have on young children's diets, and what you can do to counteract the messages

According to the National Center for Health Statistics, more than should not only be supportive but should one in five children in the United States are overweight. And the problem is creeping downward on the age scale, threatening even preschool children. At the same time, type 2 diabetes—once called adult-onset diabetes-is affecting children as young as 4, while attention deficit hyperactivity disorder (ADHD) is also on the rise. Are the problems linked? David Ludwig, M.D., Ph.D., director of the Optimal Weight for Life program at Children's Hospital Boston, thinks they may be. He lays the blame squarely on diets heavy

TV commercials that make bad foods being cool, appealing, and desirable. And look so good to kids.

nerable to media messages, as this is the seeing the "cool" stuff other kids have. age at which they learn eating habits that will stay with them for life. The key, he says, is to send your own messages about teachers do to help? and adopting good habits.

## choices on their own.

DR. LUDWIG: While it's true that parents

in processed and fast foods-a situation that's bad for their children. Unhealthy made worse by the constant barrage of foods and snacks are presented to kids as once they do go to school, they'll be trad-Young children are particularly vul- ing foods they brought from home, and

smart eating by making healthy choices OR. LUDWIG: If you start early and use this ing down habits that will take hold later. time to teach good eating habits, you can help prevent problems. By the time a decades, soft-drink consumption has gone Parent & Child: How much influence do TV child becomes overweight and parents up threefold. Kids used to drink three commercials really have on young children's become alarmed, food habits are already servings of milk for every serving of soda. diets? It's clear children aren't making food well established, and parent-child power Now those numbers are reversed. struggles can arise.

Young children need to learn about a Parent & Child: How big a role does lack of tor, when parents give in and buy stuff adult behavior. Parents, in particular, commercials are a bigger offender. The

also live a healthful lifestyle that includes eating nutritious foods and getting regu-

#### Parent & Child: What contributes to poor eating habits and unhealthy lifestyles?

DR. LUDWIG: Families are busy. Children have less opportunity to see their parents preparing and eating nutritionally sound meals. Research shows that when meals are not eaten at home, the nutritional quality of the food goes down, and the number of calories consumed goes up.

Kids are eating more junk than they used to. Take fast food, for instance: During any given week, three out of four children eat a fast-food meal one or more times a day, Rates of fast-food consump-Parent & Child: So what can parents and tion may be lower in younger children. but again, the youngest children are lav-Soda is another example: In the last two

#### control what young children ear, children healthful diet and lifestyle from the physical activity play in childhood obesity? are nonetheless absorbing messages from people who love them and who have their DR. LUDWIG: You can partly blame a lack

TV. You can't underestimate the nag fac- best interests at heart. Children imitate of exercise, but I think that incessant TV

#### Why Experts Are Urging Swifter Treatment for Children With Obesity

The New York Times

January 27, 2023 Friday 13:52 EST

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Section: HEALTH Length: 1552 words Byline: Gina Kolata

Highlight: Growing research has shown that intensive interventions are needed, scientists say. Here is why their

advice is changing.

#### Body

Growing research has shown that intensive interventions are needed, scientists say. Here is why their advice is changing.

The American Academy of Pediatrics recently issued new guidelines for treating the more than 14 million children and adolescents with obesity in the United States. The recommendations came as a surprise to many parents, and to some experts, as they encourage vigorous behavioral interventions even for very young children, as well as drug treatment or surgery for adolescents.

The guidelines spring from a scientific understanding of obesity that has been evolving for decades. Obesity is a risk factor for a number of disorders, including Type 2 diabetes, high blood pressure, joint and back pain, and several cancers. Treating the problem as early as possible may help prevent a lot of misery.

Here are answers to some questions about pediatric obesity research and why experts are now advising aggressive treatment.

What do the new guidelines say about the causes of obesity?

The A.A.P. recommendations stress that obesity is not just a consequence of poor eating habits and a lack of exercise. Obesity is a chronic disease with many intertwined causes, including genetics.

Researchers now know that obesity is one of the most strongly inherited traits. Studies conducted decades ago showed that identical twins reared apart usually grow up to have similar body shapes and weights. Adopted children tend to have the same shapes and weights as their biological parents.

A genetic predisposition sets the stage for some children to gain weight in an environment in which food — often poor-quality food — is everywhere. And weight gain can become a vicious cycle.

Children and adolescents with obesity often experience teasing and bullying, which, the A.A.P. committee wrote, contribute to "binge eating, social isolation, avoidance of health care services and decreased physical activity, further complicating the health trajectory."

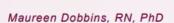
How do scientists define overweight and obesity?

They are defined by body mass index, a measure of weight and height. (It is an imperfect measure; many muscular athletes, for example, have high B.M.I.s but are in excellent shape.)



## Rapid Review Guidebook

Steps for conducting a rapid review





Dobbins, M. (2017). Rapid Review Guidebook. Hamilton, ON: National Collaborating Centre for Methods and Tools.

The National Collaborating Centre for Methods and Tools (NCCMT) is hosted by McMaster University and funded by the Public Health Agency of Canada. The views expressed herein do not necessarily represent the views of the Public Health Agency of Canada.

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## **Evidence Synthesis Library Seminar Learning Outcomes**

- Understand the importance of evidence synthesis when critically evaluating health issues
- Synthesis, evaluate, communicate, and comment on child health research issues
- Note the value of different evidence synthesis reviews and where rapid reviews fit in
- How best to select appropriate scholarly databases
- The importance of thinking like each database to get the best results
- Screening results for eligibility using inclusion/exclusion criteria
- Identifying emergent themes and writing up results
- Recognize the value of zoterobib and Zotero citation management software
- Documenting findings using PRISMA reporting guidelines and references
- Knowing where and how to get help

## **TIPS**

- Start early searching and evaluating resources is an iterative process
- Invest in using zoterobib and Zotero citation management software
- Follow course assignment guidelines and instructions
- Some digital resources work best on- vs. off-campus access
- Lean on colleagues when appropriate
- Book a consultation if needed
- Email Ian or the library at any time

Become: PubMed certified

zoterobib frequent user

Zotero enabled

Evidence synthesis savvy



Man sitting near table with laptop photo by <u>Joseph Frank</u> on <u>Unsplash</u>

## Where can I get help with seeking information?

Brock Library Health Sciences Research Guide

https://researchguides.library.brocku.ca/HLSC

**Email the Library** 

libhelp@brocku.ca

Ask Us Chat service

https://brocku.ca/library/chat/



**Book a Consultation** 

https://calendar.library.brocku.ca/appointments/researchconsultation



Ian Gordon

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